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[SCHOOL ORGANIZATION: THEORY AND PRACTICE; SELECTED READINGS ON GRADING, NONGRADING, MULTIGRADING, SELF-CONTAINED CLASSROOMS, DEPARTMENTALIZATION, TEAM TEACHING, HOMOGENEOUS VS. HETEROGENEOUS GROUPING. SELECTED BIBLIOGRAPHIES.] RAND MCNALLY EDUCATION SERIES.

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Descriptors-*ABILITY GROUPING, *ANNOTATED BIBLIOGRAPHIES, CONTINUOUS PROGRESS PLAN, DEPARTMENTAL TEACHING PLANS, EDUCATIONAL THEORIES, ELEMENTARY SCHOOLS, HETEROGENEOUS GROUPING, HOMOGENEOUS GROUPING, HORIZONTAL ORGANIZATION, MULTIGRADED CLASSES, NONGRADED SYSTEM, *SCHOOL ORGANIZATION, SECONDARY SCHOOLS, SELF CONTAINED CLASSROOMS, *TEAM TEACHING, UNGRADED SCHOOLS, VERTICAL ORGANIZATION

Over 400 journal articles, case studies, research reports, dissertations, and position papers are briefly described in a series of eight selected bibliographies related to school organization. The eight specific areas treated in the volume and the number of items listed for each include: nongraded elementary school organization, 96; nongraded junior and senior high school organization, 43; multigraded school, 41; self-contained classroom, 43; departmentalization, 41; elementary school team teaching, 54; junior and senior high school team teaching, 33; and ability grouping, 92. With minor exceptions the bibliographies consist of items published since 1960. (JK)

marian pope franklin

school organization:

theory and practice

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School Organization: Theory and Practice

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School Organization: Theory and Practice

Selected Readings on
Grading
Nongrading
Multigrading
Self-Contained Classrooms
Departmentalization
Team Teaching
Homogeneous vs. Heterogeneous Grouping

Marian Pope Franklin
University of North Carolina
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Rand McNally & Company, Chicago

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B. Othanel Smith, *Advisory Editor*

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Preface

There are many ways to organize schools and classrooms. The selections in this book were written or assembled to give readers a concise view of vertical and horizontal school organization and some of the best readings for the elementary, the junior high, and the senior high schools. Each chapter contains selections which explore various organizational alternatives. The bibliographies lead to further sources of information. It is hoped that the material will help school staffs and students of education to understand school organization more fully. It is also hoped that this material will reveal possibilities and new directions that could, and perhaps should, be tried.

I wish to express gratitude to the authors and publishers who have graciously allowed use of their material. Also, I want to thank the Research Council of the University of North Carolina at Greensboro, and my colleagues at that institution, Kenneth E. Howe, William P. Colbert, and Anne M. Kreimeier, for their encouragement and support. To my husband, Gwyn, and my parents, Mr. and Mrs. John J. Pope, my gratitude and appreciation for their continued faith and encouragement in the preparation of this volume.

Marian Pope Franklin
University of North Carolina
Greensboro, North Carolina
January 20, 1967

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Nongraded School Organization: The Elementary School

"Albany Plan of Primary School Organization." *Elementary School Journal* 36:413–416, February 1936.
Describes plan based on chronological age and reading readiness used in Albany, New York in 1936. There was no repeating or skipping but continuous progress through achievement levels at varying rates. Article is of historical significance.

Anderson, Robert H. "Organizational Character of Education: Staff Utilization and Deployment." *Review of Educational Research* 34:455–469, October 1964.
Points out a school experiment usually involves many changes. Nongrading, for example, stimulates interest in team teaching. Discusses team teaching, sub-professional personnel, the flexible school, nongrading, grouping, flexible scheduling, and technology.

Anderson, Robert H. "Some Types of Cooperative Teaching in Current Use." *National Elementary Principal* 44:22–26, January 1965. Included in Chapter 8.
Gives examples of team teaching, of nongrading, and of experiments designed to overcome disadvantages of the traditional graded school.

Anderson, Robert H. *Teaching in a World of Change.* New York: Harcourt, Brace and World, 1966.
Includes chapters on organization of schools, nongraded school, cooperative teaching, and school library and materials center.

Association for Childhood Education International. *Toward Effective Grouping.* Bulletin 5-A. Washington, D.C.: the Association, 1962.
Shows impact of cultural change on school grouping practices. Describes programs in Appleton and Milwaukee, Wisconsin, and Salt Lake City, Utah.

Austin, Kent C. "The Ungraded Primary School." *Childhood Education* 33:260–263, February 1957.
Describes the Continuous Progress Primary at Westwood School, Park Forest, Illinois. Gives the orientation plan, school procedures, and a summary of the community evaluation.

Austin, Kent C. *The Ungraded Primary Unit in Public Elementary Schools of the United States.* Doctoral Dissertation, University of Colorado, 1957. Also in *Dissertation Abstracts* 19:73–74.
Used a questionnaire to gather information on the objectives, development, operation, professional staff, and public relations of the ungraded primary unit.

Austin, Mary C. and Morrison, Coleman. *The First R: The Harvard Report*

on Reading in Elementary Schools. New York: Macmillan Company, 1963.
Recommends flexible grouping to provide for individual differences. Says the ungraded approach, at least in reading, should be tried so pupils will be free to progress according to their ability.

Beggs, David W. and Buffie, Edward G. (Editors). *Independent Study.* Bloomington, Indiana: Indiana University Press, 1965. pp. 68–82.
Describes the independent study programs, facilities, and instructional materials for the elementary school.

Bethune, Paul. "The Nova Plan for Individualizing Learning." *Science Teacher* 33:55–57, November 1966.
Describes nongraded continuous progress science program for the elementary and secondary years developed at Nova School, Fort Lauderdale, Florida.

Bishop, C. W. "Role of the Local Administrator in Reorganizing Elementary Schools to Test a Semi-Departmentalized Plan." *Journal of Educational Sociology* 34:344–348, April 1961. Also see references by Heathers, Stoddard, and Trachtman.
Describes the elementary school Dual Progress Plan at Ossining and Long Beach, New York. Half of the day is in a graded arrangement and half in a nongraded.

Black, Hillel. "A School Where Children Teach Themselves." *Saturday Evening Post* 11:60–85, June 19, 1965.
Describes Valley Winds Elementary School in suburban St. Louis, Missouri. Nongrading, team teaching, and independent study are featured.

Blackstock, C. R. *A Field Study to Initiate an Ungraded Primary School in Brazesport.* Doctoral Dissertation, University of Houston, 1961. Also in *Dissertation Abstracts* 22:2258.
Concludes ungraded primary, when properly introduced, merits close attention for its overall advantages to teacher and pupils.

Bockrath, Sister M. Bernarda. *An Evaluation of the Ungraded Primary as an Organizational Device for Improving Learning in Saint Louis Archdiocesan Schools.* Doctoral Dissertation, St. Louis University, 1958. Also in *Dissertation Abstracts* 19:2819–20.
Compared reading test scores of students in graded classes with those in ungraded. Found ungraded students had a median reading increase of five months over that of graded. A questionnaire further revealed overwhelming majority of primary teachers in St. Louis Archdiocese favored ungraded program.

Brickell, Henry M. *1961 Catalogue of Educational Change.* Albany, New York: State Department of Education, October 1961.
Survey of changing instructional practices and description of programs in public and non-public elementary and secondary schools of New York State. Includes nongraded references.

Brossard, Chandler. "A School for the Future." *Look* 29:55–56, March 9, 1965.
Description of the Garden Springs Elementary School in Lexington, Kentucky. Nongrading and achievement level grouping are features.

Buffie, E. G. *A Comparison of Mental Health and Academic Achievement; The Nongraded School vs. The Graded School.* Doctoral Dissertation,

School of Education, Indiana University, 1962. Also in *Dissertation Abstracts* 23:4255.
Measured mental health and academic achievement in four graded schools with that of four nongraded schools. All differences favored nongraded.

Carbone, Robert F. *Achievement, Mental Health, and Instruction in Graded and Nongraded Elementary Schools.* Doctoral Dissertation, University of Chicago, 1961.
Showed clear-cut models of grading and nongrading were not yet available. The curriculum practices and the goals of instruction in some of the nongraded schools in his study appear graded even though they were labeled nongraded.

Carbone, Robert F. "Non-Graded School: An Appraisal." *Administrator's Notebook* 10: September 1961. Also see *Elementary School Journal* 62:82–88, November 1961.
Reports study of the relation between organizational structure and instructional practices. Schools designated as nongraded were accepted for study. No criteria had to be met. Concludes a change in school organization will not produce higher academic achievement unless it is accompanied by appropriate adaptations in the instructional practices.

Chadwick, Ruth E., *et al.* "The Report Card in a Nongraded School." *National Elementary Principal* 45:22–28, May 1966.
Describes the efforts of an elementary staff in a nongraded school to design a report card consistent with its philosophy.

Chastain, C. S. *An Experimental Study of the Gains in Achievement in Arithmetic and Reading Made by the Pupils in the Intermediate Grades in the Rangeley, Colorado, Elementary School Who Were Introduced in Traditional Classrooms, in Achievement Platoons, and in Nongraded Classrooms.* Doctoral Dissertation, Colorado State College, 1961. *Abstracts of Field Studies on the Degree of Doctor of Education* 23:75–79, 1962.
Compared test scores of pupils in arithmetic and reading in grades 4–6 with students of achievement-platoon classes and nongraded classes. Concluded no significant differences in achievement due to grouping homogeneously by achievement and/or ability. Teacher opinion poll revealed most parents, pupils, and teachers preferred the nongraded school and it was better for all three.

Clara Francis, Sister and Mary Loretta Rose, Sister. "Ungraded School System Offers Greater Advantages Than the Graded School System." *National Catholic Education Association* 60:429–436, August 1963.
Debate by two supervisors whether teachers in a graded or nongraded school system can give more attention to individual differences.

Cowles, Gardner. "Speech at Annual Meeting of the National School Boards Association." *Education USA*, April 8, 1965.
Editor of Look *points out the importance of early years of schooling. Recommended first three grades be organized into ungraded units.*

Dean, Stuart E. "Nongraded Schools." *Education Brief.* U.S. Department of Health, Education, and Welfare, Office of Education. Brief OE 20009. Washington, D.C., July 1964.
Describes graded and nongraded structure and curricular implications. Gives pros and cons, evaluation, research results, etc. Reports studies with contrasting findings.

Dean, Stuart E. "Nongraded Schools: Is There Magic in It?" *School Life* 47:18–23, December 1964.
Summarizes growth, development, and application of nongrading. Gives pros and cons of plan.

Drinkard, Mary Barbara. *A Comparison of Achievement in Skills of Written Expression Between Third Year Children in Nongraded and Graded Elementary Schools.* Master's Thesis, University of North Carolina, 1963.
Compared written skills of 30 graded pupils with those of 30 nongraded. Differences favored nongraded.

Dufay, F. R. *The Development of Procedures for the Implementation of the Nongraded Primary School in Central School District No. 4, Plainview-Old Bethpage, New York. Doctoral Dissertation,* New York University, 1963. Also in *Dissertation Abstracts* 25:2311.
Recommends adopting nongraded plan at a gradual pace, modifying existing grouping to allow some interage mixing, and changes in promotion policy.

Dufay, F. R. *Ungrading the Elementary School.* West Nyack, N.Y.: Parker Publishing Company, Inc., 1965.
Defines ungraded school. Gives preludes to starting an ungraded program in a Long Island elementary school. Describes the role of specialists in art, physical education, music, etc. Reports techniques tried.

Edgerton, Alice K. and Twombly, Ruth W. "Programmed Course in Spelling." *Elementary School Journal* 60:380–386, April 1962.
Report of a third grade spelling experiment in Weston, Massachusetts. Has implications for individual work in graded, nongraded, or multigraded schools.

Enevoldsen, C. L. *An Evaluation of the Ungraded Primary Program in Selected Schools in the Lincoln, Nebraska Public School System.* Doctoral Dissertation, University of Nebraska Teachers College. 1961. Also in *Dissertation Abstracts* 22:3054.
A study to determine the degree of success of the ungraded primary program in Lincoln showed there was very little difference in basic structure between the graded and the ungraded. It was logical, therefore, that the researcher found no significant difference in academic achievement. Reports principals, teachers, and parents still favored the ungraded plan.

Estes, Nolan. "Nation's School of the Month: Valley Winds Elementary School, St. Louis County, Missouri." *Nation's Schools* 75:61–64, March 1965. Also see Hillel Black. Other references by Estes in *School and Community* 51:8–9, May 1965 and *Audiovisual Education* 10:142–143, February 1965.
Describes outstanding school with nongraded, team teaching program.

"Explorations in Education." *School Management* 3:58, February 1959.
Reports the extension of an ungraded plan from grades 1–3 to 4–8 in Edmonds, Washington.

Ferguson, D. A. and Neff, N. "The Nongraded School Administers to the Dull-Normal Child." *School and Community* 47:16–17, October 1960.
Identifies advantages of nongraded plan for the slow learner.

Ford, J. P. *An Analysis of Organizational Structure and Peer Status in a Nongraded School.* Doctoral Dissertation, University of California, 1965. Also in *Dissertation Abstracts* 26:5578.

Analyzed relationships between formal organization (team teaching and self-contained classroom) and the informal organization (peer status and the characteristics attributed to it). Tested five hypotheses.

Franklin, Marian Pope. "Nongraded Organizational Patterns: Theory and Practice." *Virginia Journal of Education* 56:11–13, April 1963.
Describes nongraded philosophy, organization, and practice.

Frazier, Alexander. "Needed: A New Vocabulary for Individual Differences." *Elementary School Journal* 61:260–68, February 1961.
Points out nongrading frequently results in the modification of only one dimension, rate of learning.

Glogau, Lillian and Fessel, Murray. *The Nongraded Primary School: A Case Study*. West Nyack, N.Y.: Parker Publishing Company, 1967.
Describes operation of a nongraded primary. A "how we did it book," written by the administrators.

Goldberg, Albert L. "Programmed Spelling: A Case Study." *Audiovisual Instruction* 8:94–96, February 1963.
Report of the development and successful use of first grade programmed spelling in Livonia, Michigan. Has implications for graded, nongraded, or multigraded classrooms.

Goodlad, John I. "Individual Differences and Vertical Organization of the School." *Individualizing Instruction*. Sixty-first Yearbook of the National Society for the Study of Education, Part I. Chicago: University of Chicago Press, 1962. pp. 209–38.
Discusses form and function of vertical school organization. Gives ways to modify the graded structure. Describes and appraises some nongraded plans.

Goodlad, John I. "Meeting Children Where They Are." *Saturday Review* 48:57–59, 72–74, March 20, 19[illegible].
A classic in nongraded literature in which the author compares graded and nongraded concepts.

Goodlad, John I. and Anderson, Robert. "Education Practice in Nongraded Schools: A Survey of Perceptions." *Elementary School Journal* 63:33–40, October 1962. Also see *Elementary School Journal* 62:261–269, February 1962; and *Education Digest* 31:8–11, May 1966.
Surveyed reasons for introducing nongrading and the changes effected by the authors.

Goodlad, John I. and Anderson, Robert H. *The Nongraded Elementary School*. Revised Edition. New York: Harcourt, Brace and World, Inc., 1963.
Describes the philosophy underlying nongrading and gives the details of putting the plan into action. Includes chapters on curriculum, reporting pupil progress, mental health, and organization.

Goodlad, John I. and Hunter, Madeline C. "The Big-City School—Problems and Prospects." *PTA Magazine* 59:81–90, April 1965.
Shows children from harsh environments began school with handicaps. Points out characteristics of adequate schools and suggests nongraded organization can help meet them.

Goodlad, John I. and Rehage, Kenneth. "Unscrambling the Vocabulary of School Organization." *NEA Journal* 51:34–35, November 1962.
Points out need for a common vocabulary in describing school organization.

Goodrich, L. P. "Organization and Individual Progress in the Primary School." *Wisconsin Journal of Education* 65:232, January 1933.
Reports schools in Fond du Lac, Wisconsin abolished graded system in the primary years in favor of a primary school. Reading achievement was the chief grouping criteria. Article is of historical interest.

Hanson, Lincoln F. "Schools Using Programmed Materials." *Audio-Visual Instruction* 8:101–103, February 1963.
Reports grade level listing of school systems using programmed instruction. Useful for planning independent study activities in graded, nongraded, or multigraded schools.

Heathers, Glen. "Dual Progress Plan." *Educational Leadership* 18:89–91, November 1960. Also see articles by Trachtman, Stoddard and Bishop.
Description of Dual Progress Plan in grades 3–8 in Long Beach and Ossining, New York. All teachers are full-time specialists in one of seven curricular areas—language arts, social studies, mathematics, science, physical education, arts and crafts, and music.

Hickey, Sister Mary Paul. *Analysis and Evaluation of the Ungraded Primary Program in the Diocese of Pittsburgh.* Doctoral Dissertation, Fordham University. 1962. Also in *Dissertation Abstracts* 23:2817.
Study of 754 ungraded and 603 graded primary students favors ungrading.

Hillson, Maurie. *Change and Innovation in Elementary School Organization.* New York: Holt, Rinehart and Winston, 1965.
A selection of readings concerned with ability grouping, departmentalized and semi-departmentalized plans, team teaching, dual progress, multigrading, and nongrading.

Hillson, Maurie, *et al.* "A Controlled Experiment Evaluating the Effects of a Nongraded Organization on Pupil Achievement." *Journal of Educational Research* 57:548–550, July–August 1964.
A report of an experiment with 26 students in a graded arrangement and 26 in a nongraded to discover the effects of such organization on reading achievement. Study favors nongrading.

Hoflich, Right Rev. Msgr. J. E. "Ungraded Primary." *National Catholic Education Association Bulletin* 57:8–25, November 1960.
Describes the ungraded primary grouping arrangement in all the elementary schools of the St. Louis, Missouri Archdiocese. Reports failure pattern has been cut 10–15 per cent since program has been functioning.

Hunter, Madeline C. "Dimensions of Nongrading." *Elementary School Journal* 65:20–25, October 1964. Also in *Education Digest* 30:35–38, November 1964.
Describes nongrading as a plan that forces decisions concerning the educational opportunities that most successfully advance the learning of each student.

Hunter, Madeline C. "When the Teacher Diagnoses Learning." *Educational Leadership* 23:545–549, April 1966.
Points out the importance of diagnosis and prescription for all learners. Article has implications for teachers of graded, nongraded, and multigraded classrooms.

Hunter, Madeline C. "You—as a Diagnostician." *Instructor* 76:31, 126, February 1967.

Asks teachers to determine appropriate learning tasks and instructional materials on the basis of a diagnosis of each student's present knowledge in each subject. Such diagnosis is absolutely essential for prescribing in nongraded or multigraded schools. It should also be true of graded ones.

Ilg, F. L. and Ames, L. B. "Viewpoint on School Readiness." *School and Society* 92:397–402, December 26, 1964. This article is Chapter 1 of their book *School Readiness: Behavior Tests Used at Gesell Institute,* Harper, 1964.

Advocates nongrading and grouping on the basis of developmental readiness through junior high.

Jaffa, N. Neubert and Brandt, R. M. "Approach to the Problems of a Downtown School." *National Elementary Principal* 44:25–28, November 1964.

Account of nongraded organization, team teaching, and in-service education in a Baltimore elementary school.

Jaquetta, F. C. *A Five Year Study to Determine the Effects of the Ungraded Classroom Organization in Reading Achievement in Grand Junction, Colorado.* Doctoral Dissertation, Colorado State College of Education, 1959.

Found pupils from ungraded schools made significantly higher scores at the 1% level of confidence in mean reading achievement than the pupils from graded schools.

Johnson, Glenn R. "Lots of Smoke but Little Fire." *Educational Forum* 29:159–164, January 1965.

Questions evidence supporting claims made for the nongraded school. Gives 10 guidelines for implementing new elementary school organizational structure.

Keller, Charles R. "History and Social Sciences: Selections and Recommendations." *Journal of Secondary Education* 37:263–270, May 1962.

Says the curriculum should be kept flexible so it will fit the nongraded elementary and secondary school. Suggests scope and sequence.

Kelly, Alice Jo. *The Ungraded Primary Program: An Analysis of the Plan with Emphasis on Its Use in North Carolina.* Master's Thesis, University of North Carolina at Chapel Hill, 1963.

Identifies organization and basic philosophy of the ungraded primary unit and the use of the plan in North Carolina.

Komoski, P. Kenneth. "Programmed Instruction: New Technique for Independent Study." *PTA Magazine* 56:15–17, March 1962.

Recommends programmed instruction for homework assignments at every level.

Kvaraceus, William C. "The Behavioral Deviate in the Culture of the Secondary School." *Frontiers of Secondary Education, Proceedings and Conferences on Secondary Education.* Syracuse: Syracuse University Press, 1958. pp. 18–27.

Points out age-grade grouping implies to teachers and pupils an equality and homogeneity that does not exist and leads to undifferentiated instruction through use of the single text and identical assignments. Recommends broader grouping by overlapping age membership in some classes and ability achievement grouping in others.

Mary Alice, Sister. "Administration of the Non-Graded School." *Elementary*

School Journal 61:148–152, December 1960. Also see *Elementary School Journal* 57:268–271, February 1957.
Account of nongraded classes at St. Xavier College Elementary School in Chicago. Discusses use of teaching teams and teaching aides.

Moore, Daniel I. *Pupil Achievement and Grouping Practices in Graded and Ungraded Primary Schools.* Doctoral Dissertation, University of Michigan, 1963. Also in *Dissertation Abstracts* 24:32–33.
Investigated the differences in reading and arithmetic achievement between pupils in an ungraded primary and a conventional graded organization in four schools in Wayne, Michigan. Mean score of graded pupils exceeded that of ungraded in nearly all measures of achievement.

National Council of Teachers of English. "Topics of Current Interest." *Education* 84:313, January 1964.
Briefly describes continuous Progress Primary Plan used in Philadelphia, Pa. since 1961.

National Education Association, Department of Elementary School Principals. *Elementary School Organization: Purposes, Patterns, Perspective.* Forty-First Yearbook. Washington, D.C.: the Department, 1961. pp. 78–92, 115–125.
Gives report of history, current trends, and future development of elementary school. Discusses vertical school organization and team teaching and gives its merits and disadvantages.

National Education Association. Project on Instruction Report. *Planning and Organizing for Teaching.* Washington, D.C.: the Association, 1963. pp. 53–92. Filmstrip and accompanying record available.
Concise discussion of vertical and horizontal school organization. Recommends nongrading and team teaching.

National Educational Association. *Project on Instruction: Schools for the Sixties.* New York: McGraw-Hill Book Co., 1963. pp. 71–98. Also summary report in *NEA Journal,* January 1964.
Overview volume of publications of the Project on Instruction. Gives thirty-three recommendations for improving school curriculum, the classroom, materials, etc. Encourages nongrading.

National Education Association, Research Division. *Nongraded Schools.* Washington, D.C.: the Association, Research Memo. 1965–12. Also see *NEA Research Bulletin* 43:93–95, October 1965.
Survey revealed more than half of the largest school systems (enrollment of 100,000 or more) are using nongrading in one or more schools. Cites advantages and disadvantages.

National Elementary Principal. December 1961 and May 1966.
Entire issue of magazine devoted to either school organization or report cards. Has implications for graded, nongraded, or multigraded schools.

National Society for the Study of Education. *Individualizing Instruction.* 61st Yearbook, Part I. Chicago: University of Chicago Press, 1962. pp. 239–264.
An analysis by Robert H. Anderson of the nature of individual differences between and within pupils and of school practices that encourage individualizing instruction. Describes teacher orientation necessary to make individualizing effective.

National Society for the Study of Education. *The Changing American School.*

65th Yearbook, Part II. Chicago: University Press, 1966. pp. 32–84 and 110–134.
Includes two chapters by John Goodlad on the changing role of the teacher and the curriculum and a chapter on school organization by Glen Heathers.

"One-Room Schoolhouse." *Time* 77:41, May 5, 1961.
Describes nongraded cluster grouping in an elementary school in Carson City, Michigan.

Peters, Kenneth L. "Achievement Levels: Easy Half Steps to a Nongraded Plan." *Nation's Schools* 74:32–33, July 1964.
Report of a nongraded elementary plan in Beverly Hills, California.

"Planning and Operating the Middle School." *Overview* 4:52–55, March 1963.
Upper elementary grades (5–6) were combined with junior high grades (7–8–9) at Bedford School in Mount Kisco, N.Y. Subject matter ungraded as rapidly as possible. Organized around teaching teams.

"Plan Takes Lockstep and Buries It in Space." *Nation's Schools* 72:86–89, October 1963.
Presents nongrading and team teaching as practiced in the Josiah Haynes Elementary School, Sudbury, Massachusetts. School was planned and built for nongrading and team teaching.

Pratt, H. Milton. "Space—A Plan to Meet Children's Needs." *Instructor* 76:19, January 1967.
Principal from Cocoa, Florida describes operation of nongrading and team teaching in Brevard County. Says the administrators, supervisors, and teachers say it has enhanced education in Poinsett Elementary School.

Prince, Thomas C. "Trends in Types of Elementary School Organization." *American School Board Journal* 106:37–38, June 1963.
Brief report of status and trends.

Ritzenheim, Betty Ann. *Survey of Personnel Perceptions of Selected Factors in Nongraded Programs in Eight Detroit Elementary Schools.* Doctoral Dissertation; Wayne State University, 1963. Also in *Dissertation Abstracts* 25:5645.
Results from two questionnaires from 52 teachers and 8 principals identifies personnel perceptions concerning nongraded procedures and operation.

Roberts, G. M. *Case Studies of Two Nongraded Elementary School Programs.* Doctoral Dissertation, University of Tennessee, 1964. Also in *Dissertation Abstracts* 25:2830.
A study of achievement grouping in reading at a nongraded elementary school in Brevard County, Florida and ability grouping at nongraded elementary school in Sarasota County, Florida. Team teaching was used in both situations. Gives conclusions.

Russell, James N. *Change and Challenge in American Education.* Boston: Houghton Mifflin Co., 1965. Chapter 4.
Says neither team teaching nor nongrading arrangements fit the entire elementary school but each has a place. Believes elimination of grades fits the early elementary years and specialization and departmentalization fit the upper elementary.

Sanders, David C. "School Organization—How Do You Decide?" *National Elementary Principal* 42:25–28, September 1962.
Describes internal organizational questions facing schools such as: de-

partmentalization, team teaching, self-contained classroom, etc. Gives a rationale for making decisions.

Shane, Harold G. "We Can Find Better Ways of Grouping Children." *Childhood Education* 36:350–351, April 1960.
Suggests a partial solution to the grouping problem can be found in introducing more kindergartens for four-year olds and considering age four and five as an ungraded period of school living for all boys and girls.

Sloan, F. A. "Nongraded Social Studies Program for Grades Four, Five, and Six." *National Elementary Principal* 45:25–29, January 1966.
Proposes nongraded social studies curriculum for middle grades based on concepts.

Smith, Lois. "Continuous Progress Plan." *Childhood Education* 37:320–3, March 1961.
Describes "Continuous Progress" in Appleton, Wisconsin and compares it with the traditional graded structure.

Snyder, Edith Roach. *An Evaluative Study of a Developmental Elementary School Program.* Doctoral Dissertation, Wayne State University, 1957.
Describes nongraded primary plan at Webster School in Pontiac, Michigan.

Stoddard, George D. "Dual Progress Plan in Elementary Education." *Educational Forum* 25:271–6, March 1961. Also see references by Heathers, Bishop, and Trachtman.
The author of the Dual Progress Plan outlines its rationale and describes experience with it in two Long Island schools.

Stoddard, George D. "Dual Progress Plan." *School and Society* 86:351–352, October 11, 1958. Also see the book, *The Dual Progress Plan: A New Philosophy and Program in Elementary Education.* New York: Harper and Brothers, 1961.
Gives details of Dual Progress Plan. Half of the elementary school day includes instruction in social studies and language arts in a graded situation. The rest of the program is nongraded with specialist teachers.

Taylor, Toni. "Look What Two Teachers Have Done in the Little Red Schoolhouse." *Grade Teacher* 82:32–37, 121–122, September 1964.
Report of primary nongrading and team teaching in Gloucester, Massachusetts.

Tewksbury, John. *Nongrading in the Elementary School.* Columbus, Ohio: Charles E. Merrill Books, Inc., 1967.
Deals with the meaning of nongrading, its teaching procedures, curriculum levels, report forms used, etc.

"Topics of Current Interest: Continuous Progress Primary." *Education* 84:313, January 1964.
Brief explanation of the Continuous Progress Primary Plan begun in Philadelphia Public Schools in September of 1961.

Trachtman, G. M. "Role of an Inservice Program in Establishing a New Plan of Elementary School Organization." *Journal of Educational Sociology* 34:349–354, April 1961.
Reports the use of inservice education in preparing for the Dual Progress Plan in Long Beach, New York.

"Ungraded Primary—Has Your Staff Considered It?" *School Management* 3:40–44, 97–98, November 1959.

Details of ungraded programs given in a tape recorded interview with two administrators from Hillsboro, Oregon.

Wilson, Donna. "Pre-Recorded Tapes Teach a Whole Class." *Grade Teacher* 83:41–42, 130, January 1960.
Report of use of tapes in teaching at Norwalk, Connecticut. Has implications for graded, nongraded, or multigraded schools.

Woodring, Paul. "Reform Movement from the Point of View of Psychological Theory." *National Society for the Study of Education.* 1963 Yearbook, Part I. pp. 286–305.
Describes nongraded plan as one of the reforms designed to promote effective teaching and learning.

Zerby, John Richard. *A Comparison of Academic Achievement and Social Adjustment of Primary School Children in the Graded And Nongraded School Program.* Doctoral Dissertation, Pennsylvania State University, 1960. Also in *Dissertation Abstracts* 21:2644.
At end of primary period, nongraded children were eight months advanced over anticipated achievement. Graded primary children exceeded anticipated achievement by five months. Results of sociometric measures were similar. Fewer "isolates" were found in nongraded school.

Selected Bibliography

Nongraded School Organization: Junior and Senior High Schools

Alexander, William M. "The Junior High School." *Bulletin of NASSP* 49:277–285, March 1965.
Says a continuous program must be planned for junior high. Describes the possibilities for curriculum differentiation in the emerging middle school. Encourages nongrading and team teaching.

Asbell, Bernard. "Cape Kennedy's High School for Sky-High Learning." *PTA Magazine* 58:14–18, January 1964. Also in *Education Digest* 29:26–28, March 1964.
Account of a nongraded high school at Melbourne, Florida. Grouping is based on achievement in each subject regardless of year in school.
Other descriptions of Melbourne program in *Bulletin of NASSP* 46:127–134, January 1962; 47:67–68, May 1963; *Delta Kappa Gamma Bulletin* 30:22–25, Spring 1964; *Parents Magazine* 37:46–47, September 1962; *Newsweek* 60:109–112, October 8, 1962; *Scholastic Teacher* 83:18–T–19–T, October 4, 1963; *Saturday Evening Post* 235:75, 78, December 15, 1962; *Phi Delta Kappan* 47:43–46, September 1965; *School and Community* 49:20–21, September 1962; *Nations Schools* 74:10, 12, December 1964; *U.S. News and World Report* 54:80–83, February 19, 1962; and *The Changing Curriculum* by Kimball Wiles, pp. 313–321. Also check writings of B. Frank Brown.

Baker, W. Bradley. "Break-through in Brevard." *Florida Education*, September 1963. pp. 9–12.
Points out changes in Brevard County School System that have taken place since the advent of Cape Canaveral. The system has changed from graded to nongraded for all twelve years.

Beggs, David W. and Buffie, Edward G. (Editors), *Independent Study*. Bloomington, Indiana: Indiana University Press, 1965. pp. 83–217.
Describes school programs, facilities, instructional materials, team teaching, and flexible scheduling. Has implications for graded or nongraded schools.

Brickell, Henry M. "Dynamics of Change." *Bulletin of NASSP* 47:21–28, May 1963.
Explains the shifts in the major structural elements of a school which are necessary in order to introduce innovations such as team teaching, ungraded classes, use of para-professionals, flexible scheduling of large and small groups, etc.

Broudy, Harry; Smith, B. O.; and Burnett, Joe. *Democracy and Excellence in American Secondary Education*. Chicago, Illinois: Rand McNally and Company, 1964. pp. 248–255.
Proposes a high school curriculum which is appropriate for a nongraded high school.

Brown, B. Frank. "An Answer to Dropouts: The Nongraded High School." *The Atlantic* 214:86–89, November 1964.

Describes nongraded Melbourne High.

Other references by B. Frank Brown in *North Central Association Quarterly* 38:238–244, Winter 1964; *Journal of Secondary Education* 37:368–375, October 1962; 40:195–200, May 1965; *Bulletin of NASSP* 45:349–352, April 1961; 46:127, January 1962; 46:164–166, May 1962; 47:46–64, May 1963; *Overview* 2:61, May 1961; 4:68–69, June 1963; and *American School and University* 38:41–43, November 1965.

Brown, B. Frank. *The Appropriate Placement School: A Sophisticated Nongraded Curriculum.* West Nyack, N.Y.: Parker Publishing Company, Inc., 1965.

Proposes a spiral curriculum plan of schooling for kindergarten through high school. Calls for a nongraded phased organizational structure and curricula for K-12. Emphasizes team teaching and independent study. Includes chapters on school buildings, the library, dropouts, and disadvantaged students.

Brown, B. Frank. *Nongraded High School.* Englewood Cliffs, N.J.: Prentice-Hall, 1963.

Gives details of nongraded Melbourne High School organized in 1958. Discusses organization, independent study, small and large group instruction, advanced placement, expanded curriculum, ability grouping, and interest grouping.

Brown, Charles E. "The Schools in Newton: Experiment in Flexibility." *The Atlantic* 214:74–78, October 1964.

Gives a brief report of nongrading in several elementary, junior, and senior high schools in Newton, Massachusetts. Describes school-within-a-school plan used in a junior and senior high. Briefly describes mathematics, social studies, and vocational curriculum.

Carlsen, G. Robert and Conner, John W. "New Patterns for Old Molds." *English Journal* 31:244–249, April 1962.

Describes English program practiced at University High of State University of Iowa.

Clark, Gwyn R. and Noall, Matthew F. "Better Staff Utilization in Hurricane High School Through Language Arts Reorganization." *Bulletin of NASSP* 45:223–227, January 1961.

Reports homogeneously (achievement) grouped nongraded English classes for the 10–12 years resulted in gradual student improvement. Teachers rotated among various sections and taught as a team.

Clark, Leonard. "Ability Grouping—A Third Look." *Bulletin of NASSP* 47:69–71, December 1963.

Reminds the reader that ability grouping and curriculum tracks are not the only devices for providing for individual differences. Recommends grouping within the secondary school class, differentiated assignments, individualized instruction, flexible promotion system, nongraded school, etc.

Cochran, John R. "Grouping Students in Junior High School." *Educational Leadership* 18:414–419, April 1961.

Reports flexible grouping arrangement in a Kalamazoo, Michigan, junior

high school. Found the grouping did not greatly change students but did seem to influence the procedures used by teachers.

Dean, Stuart E. "Nongraded School." *School Life* 47:19–23, December 1964.
Summarizes growth, development, and application of nongrading. Gives pros and cons.

Dean, Stuart E. "Nongraded Schools." *Education Brief OE20009.* U.S. Department of Health, Education, and Welfare, Office of Education, July 1964.
Describes graded and nongraded structures, curricular implications, pros and cons, evaluation, research results, etc.

DiPasquale, Vincent C. "The Relation Between Dropouts and the Graded School." *Phi Delta Kappan* 46:129–133, November 1964. Included in Chapter 2.
Advocates abandonment of gradedness and its single standard of achievement for each grade and each academic subject. Believes this would reduce the number of dropouts. Recommends interclass grouping, multiple curricula that is sequential in levels of difficulty, and expansion of vocational and technical programs.

Docking, R. and Hogan, D. "Breaking Grade Barriers." *Michigan Education Journal* 42:16–17, January 1965.
Describes nongraded arrangement, team teaching, and independent study at a Michigan high school.

Eilers, Wm. Jr. "San Angelo's Three-Rail Program." *American School Board Journal* 149:11–12, September 1964.
Organized the first six years of the San Angelo's school system on a nongraded basis in 1962. Grades seven through twelve have three levels of instruction: slow students are in a terminal program, college-preparatory students have a middle-of-the-road program, and gifted students have a program designed to challenge them.

Figurel, J. A., *et al.* "Emerging Instructional Procedures in English." *Education* 85:249–265, January 1965.
Describes team teaching, nongrading, and other experiments at the high school level.

Filbin, Robert I. "Continuous Progress for All: Implications for the High School." *American School Board Journal* 143:11–14, October 1961.
The principal of a nongraded elementary school in Lincoln, Massachusetts presents his view of continuous progress plan and gives its implications for grouping in high school.

Franklin, Marian Pope. "New-Type School Promising." *Greensboro Daily News*: June 14, 1964.
Reports innovations at Nova High nongraded school at Fort Lauderdale, Florida.

Gelinas, Paul J. and Lacoste, Aime. "Setauket Junior High School." *Bulletin of NASSP* 47:68–69, May 1963.
Plan does away with traditional grade lines. Uses homogeneous achievement grouping in each subject area. Study shows by end of freshman year 40% of students had earned one or more sophomore credits.

Gran, Eldon H. "Ungrading the Secondary School." *SDEA Journal* 15–16, January 1964.
Gives plan for ungrading seventh and eighth grades.

Hay, Morris E. "Effective Learning Through Grouping in Junior High School." *California Journal of Secondary Education* 32:4–13, January 1957.
Found there was wide divergence within groups despite homogeneous ability grouping. Faculty decided to ungrade junior high arithmetic as a result of finding.

Hoban, F. and McManus, B. J. "How to Nongrade a Small High School." *School Management* 9:79–81, September 1965.
Description of nongraded English and social studies plan in a high school for 100 students in Tuxedo Park, N.Y. Students are sectioned on the basis of ability.

Hooten, Joseph P., Jr. "Trimester Year-round Operation of the University School." *Florida Education* 40:7–8, November 1962.
Describes nongraded school, 1–12, at University School, Tallahassee, Florida.

"How Nova Learning Levels Work." *Nation's Schools* 73:84–88, April 1964. Also see *Science Teacher* 33:55–57, November 1966.
Describes nongraded levels, team teaching, flexible scheduling, and lengthened school term at Nova High in Fort Lauderdale, Florida.

Howard, Eugene R. "The School of the Future—Now." *Bulletin of NASSP* 46:256–267, May 1962.
Superintendent of Ridgewood High School in Norridge-Harwood Heights, Illinois describes its organization. Team teaching, large and small group instruction, grouping across grade lines, and other practices are described.

Ilg, F. L. and Ames, L. B. "Viewpoint on School Readiness." *School and Society* 92:397–402, December 26, 1964. This article is Chapter 1 of their book *School Readiness: Behavior Tests Used at Gesell Institute,* Harper, 1964.
Advocates nongrading and grouping on the basis of developmental readiness through junior high.

Keller, Charles. "History and Social Sciences: Reflections and Recommendations." *Journal of Secondary Education* 37:263–270, May 1962.
Recommends curriculum be kept flexible so it will fit the nongraded elementary and secondary school. Suggests scope and sequence. Recommends advanced placement for grade 12.

McPherran, Arch. "A Multitrack English Program." *Journal of Secondary Education* 37:206–208, April 1962.
Describes English program for grades 10–12 in Beatrice, Nebraska. Students are grouped on the basis of standardized achievement test and teacher recommendation.

National Education Association. Project on Instruction Report. *Planning and Organizing for Teaching.* Washington, D.C.: the Association, 1963. pp. 63–228, 147, 169.
Concise discussion of vertical and horizontal school organization. Recommends nongrading and team teaching.

National Education Association. *Project on Instruction: Schools for the Sixties.* New York: McGraw-Hill Book Co., 1963. pp. 63–98. Two 18-minute color filmstrips and accompanying records available.
Gives thirty-three recommendations for improving schools. Includes nongraded recommendation.

Niess, Charles. "A Nongraded Program for the Small High School." *Bulletin of NASSP* 50:19–27, February 1966.
Describes nongrading with 7th & 8th year students at Roosevelt Jr.-Sr. High, Second Laboratory School of Kansas State Teachers College. Students placed in one of three achievement levels in each area of learning.

Noall, Mathew and Nuttall, Maurice. "Hurricane, Utah, High School Ungraded English Project." *Bulletin of NASSP* 185:192, January 1962.
Gives details of a plan designed to improve language arts for sophomore, junior, and senior years. Students are grouped homogeneously in five sections according to ability and skill in English language arts rather than on their class. Each teacher instructs in only one area: (1) literature; (2) grammar aid usage; (3) composition; (4) speech; or (5) reading.

Oestreich, Arthur H. "New Chrome or a New Bus?" *American School Board Journal* 149:19–20, September 1964.
Reports the Division of University Schools of Indiana University is exploring nongrading at the early primary and the junior high level. Cites some of the problems staff has recognized.

Pearson, John C. "Certainly We Group Our Students." *Phi Delta Kappan* 39:358, May 1958.
Deer Path Junior High School of Lake Forest, Illinois combines homogeneous and heterogeneous grouping. In the academic areas (English, science, mathematics, and social studies) students are grouped according to achievement on standardized tests and teacher-evaluation. In non-academic areas students are grouped heterogeneously. The Junior High School is completely departmentalized.

"Planning and Operating the Middle School." *Overview* 4:52–55, March 1963.
Report of Middle Schools for grades 6–8 at Mount Kisco and 5–9 in Sarasota County, Florida. Nongrading and team teaching featured.

Rifugiato, Francis J. "Special Courses for the Ability Student." *Bulletin of NASSP* 47:26–33, March 1963.
Report of innovations at Schenley High School in Pittsburgh including six experimental courses, college guest teachers, selected high school students attending University of Pittsburgh part time, and nongrading in some areas.

Rollins, Sidney. "High School Where No One Fails." *School Management* 5:77–79, May 1962. Also see *Time* 80:70, October 12, 1962; *Bulletin of NASSP* 47:70–72, May 1963; and *Nation's Schools* 73:110–130, April 1964.
Reports program in a six-year secondary school in Middletown, Rhode Island, featuring nongrading, achievement grouping, team teaching, and flexible scheduling. Each student learns at his own speed.

Rollins, Sidney. *The Middletown Project: Development of a Nongraded Secondary School.* Providence, Rhode Island: Division of Graduate Studies, Rhode Island College, 1962.
Gives resume of Six-Year Secondary Nongraded School at Middletown, Rhode Island. Includes a statement of philosophy and purposes; a description of the school as it now exists with no grade designations; curriculum organization in terms of six or seven years of a subject field and a flexible schedule. Cites unsolved problems, such as pupil evaluation and in-service education.

Whitmire, Janet. "The Independent Study Program at Melbourne High." *Phi Delta Kappan* 47:43–46, September 1965.

Describes organization, facilities, admission procedures, course requirements and independent study programs followed by Melbourne High students. Has implications for graded and nongraded schools.

Selected Bibliography

Multigraded School Organization

Adams, Joseph J. "Achievement and Social Adjustment of Pupils in Combination Classes Enrolling Pupils of More than One Grade." *Journal of Educational Research* 47:151–155, October 1963.
Found fifth-grade students in combination classes achieved as well as fifth-grade pupils in regular classes.

Association for Childhood Education International. *Toward Effective Grouping.* Bulletin 5–A. Washington, D.C.: the Association, 1962.
Describes interage grouping (or multigrading) in the Upper Elementary School at the University of Utah. Includes a discussion of multigrade philosophy by Warren Hamilton.

Bahner, John M. *An Analysis of an Elementary School Faculty at Work: A Case Study.* Doctoral Dissertation, University of Chicago, 1960.
Reports the efforts of the Englewood, Florida, staff in reorganizing the elementary school to a multigraded arrangement.

Bahner, John M. "In Grades Four Through Six." *Reading Instruction in Various Patterns of Grouping.* Proceedings of Annual Conference on Reading. Chicago: University of Chicago, 1959. pp. 95–98.
Explains the reading program in Englewood, Florida. Grouping is multigraded.

Beauchamp, Mary. "How Should We Look at Levels—From the Psychology of Learning." *Childhood Education* 32:164–167, December 1955.
Urges a reconsideration of grade-level grouping. Advocates multigraded arrangement for elementary school.

Bienvenus, Harold J. and Martyn, Kenneth A. "Why Fear Combination Classes?" *American School Board Journal* 130:33–34, 98, April 1955.
Says combining two grades into one class has advantages for teacher and students.

Brickell, Henry M. *1961 Catalog of Educational Change.* Albany, New York: State Department of Education, October 1961.
Reports results of a survey of new programs in the public and nonpublic elementary and secondary schools of New York State. Includes references on multigrading.

Carlson, Wesley H. "Interage Grouping." *Educational Leadership* 15:363–368, March 1958.
Describes attempts to provide for individual needs by combining graded and nongraded grouping into interage primary grouping. Gives the advantages in terms of five factors needed for a good elementary program.

Chace, E. Stanley. *An Analysis of Some Effects of Multiple-Grade Grouping in an Elementary School.* Doctoral Dissertation, University of Tennessee, August 1961. Also in *Dissertation Abstracts* 22:3544.
Conducted a study in Tennessee evaluating classroom results in which two to four different grade levels were taught by one teacher compared

to matched single-grade groupings. Found students in multiple-grade groupings showed a slight but consistent advantage over students in single-grade groupings in academic achievement and a slight advantage in personality and social development. Also found parents accepted the theory of multiple-grading; however, they did not care for its practice.

Chicago Board of Education, Nikola Tesla Elementary School. *Multi-Graded Developmental Plan Handbook for Parents.* Chicago Board of Education, 1961.

Chicago Board of Education, Nikola Tesla Elementary School. *Multi-Graded Elementary School: An Experimental Program for Educating the Culturally Deprived.* Chicago Board of Education, 1963.
In a low-income area of Chicago, the kindergarten through the third years were ungraded. Classes were composed of students from two or three grade levels in a deliberate attempt to break the lockstep of the graded school.

Clausen, Robert. "Grouping for Continuous Learning." *Childhood Education* 36:352–353, April 1960.
Discusses several grouping possibilities such as the school with the ungraded system, the combination-grade classroom, and team teaching techniques.

Douglass, Malcolm P. "Reading and Nongrading in the Elementary School." *Claremont Reading Conference 26th Yearbook,* edited by Malcolm P. Douglass, 1962. pp. 85–95.
Discussion of five major patterns of school organization that have implications for reading: departmentalization, staggered sessions, continuous progress, departmentalization within a teaching team, and multi-age grouping. Describes multi-age grouping at the Sycamore School in Claremont, California.

Drummond, Harold. "Grouping: A Preliminary Statement." *School Life* 45:9–10, June 1963.
Reports conference of the Office of Education. Predicts multigraded grouping will return. Makes other predictions concerning teaching, learning, and grouping.

Franklin, Marian Pope. "Vertical, Horizontal or in All Directions." *North Carolina Education Journal* 32:12, 34, 35, December 1965. Included in Chapter 1 as "Vertical and Horizontal School Organization."
Describes vertical organizational alternatives: grading, multigrading, and nongrading; and horizontal alternatives: self-contained classroom, departmentalization, and team teaching.

Gilbert, Jerome H. "Multigraded Development Plan Focuses on Pupil Achievement, Tesla School Breaks Through Traditional Graded Structure." *Chicago Schools Journal* 43:209–14, February 1962.
School principal explains activities of school changing from a graded to a multigraded organization. Describes primary and elementary multigrading at Tesla School in Chicago, Illinois.

Gilbert, Jerome H. "Tesla School Breaks the Lock Step." *Elementary School Journal* 64:306–309, March 1964.
Report of the continuous development program at a Chicago school located in a slum area. Curriculum is nongraded and sometimes grouping is interaged for the primary years.

Goodlad, John I. and Anderson, Robert H. *The Nongraded Elementary School.* Revised Edition. New York: Harcourt, Brace and Company, 1963.
Major coverage of the nongraded school. Includes philosophy and details of multigrading.

"Gradeless School." *Newsweek* 52:76, September 15, 1958.
Reports ungraded primary at Port Washington, New York; Westport, Conn.; and Waldwick, New Jersey; ability grouping at Galveston, Texas; Philadelphia, Pa.; and Dade County, Florida; and multigraded arrangement at Torrance, California.

Hester, Kathleen. "Every Child Reads Successfully in a Multiple-Level Program." *Elementary School Journal* 53:86–89, October 1952. Also in *Readings on Reading Instruction* by Albert J. Harris. New York: David McKay Company, Inc., 1963. pp. 156–160.
Advocates multiple-level reading programs for elementary school instruction. Pupils join any group or groups within the self-contained classroom.

Hamilton, Warren W. "Multigrade Grouping: With Emphasis on Differences." *Toward Effective Grouping.* Washington, D.C.: Association for Childhood Education International, 1962. pp. 54–64.
Superintendent of Schools of Torrance, California describes the multigrade plan of grouping in the elementary grades. Cites research evidence to show success of the arrangement.

Hunter, Madeline C. "Teachers in the Nongraded School." *NEA Journal* 55:12–15, February 1966. Included in Chapter 3.
Cites new kinds of decisions required of teachers in nongraded programs. Describes three-year age span of learners arrangement which is multigrading.

Imhoff, Myrtle. *Early Elementary Education.* New York: Appleton-Century-Crofts, Inc., 1959. Chapter 7.
Discusses three types of school organization in practice at the early elementary level: the primary unit, the graded plan, and the multigraded or interage plan.

Laas, Maria. "The Multi-Grade Room Concept at Prairie Lane School." *1964 APPS Yearbook.*
Describes graded and ungraded programs in Omaha, Nebraska in large room with 4–6 teachers and students.

Lane, Howard A. "Moratorium on Grade Grouping." *Educational Leadership* 4:385–395, March 1947.
Discusses graded concept of school grouping. Recommends interage grouping.

Lane, Howard and Beauchamp, Mary. *Human Relations in Teaching.* Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1955. pp. 298–303.
Recommends class groups have a wide range of ages, cutting across several grade lines. This is multigrading—sometimes called interage grouping.

National Education Association, Department of Elementary School Principals. "Toward Improved Vertical Organization." *Elementary School Organizations: Purposes, Patterns, Perspectives.* Forty-First Yearbook. Washington, D.C.: the Department, 1961. pp. 78–92, 115–125.
Gives report on history, current trends, and future development of elementary school. Discusses vertical school organization and team teaching and gives the merits and disadvantages.

National Education Association. Project on Instruction Report. *Planning and Organizing for Teaching.* Washington, D.C.: the Association, 1963. pp. 53–92.

Concise discussion of vertical and horizontal school organization.

National Education Association. *Project on Instruction: Schools for the Sixties.* New York: McGraw-Hill Book Co., 1963. pp. 71–98. Summary report in January 1964 *NEA Journal.*

Overview volume of the Project on Instruction. Gives thirty-three recommendations for improving school curriculum, the classroom, materials, space, etc.

National Education Association, Research Division. *Nongraded Schools.* Washington, D.C.: the Association. Research Memo. 1965–12.

Cites advantages and disadvantages of nongrading. Briefly describes multigrading.

National Society for the Study of Education. *Individualizing Instruction.* 61st Yearbook, Part I. Chicago: University of Chicago Press, 1962. pp. 239–264.

Study of the nature of individual differences between and within pupils, school practices that encourage individualizing, and teacher orientation necessary to make it effective.

Otto, Henry J. and Sanders, David C. *Elementary School Organization and Administration.* Fourth Edition. New York: Appleton-Century-Crofts, 1964. pp. 112–114.

Discusses multi-age grouping and graded placement.

Polkinghorne, Ada R. "Grouping Children in the Primary Grades." *Elementary School Journal* 50:502–8, May 1950.

Describes multigrading in the primary years at the University of Chicago Laboratory School. Presents data from a questionnaire designed to locate other plans.

Polkinghorne, Ada R. "Parents and Teachers Appraise Primary-Grade Grouping." *Elementary School Journal* 51:271–78, January 1951.

Also see *Elementary School Journal* 50:502–508, May 1950.

Author questioned 130 parents at the Laboratory School of the University of Chicago, and found the ungraded approach had proved popular with both parents and their primary children. Parents believed children had been helped significantly in making adjustments to the third grade.

Rehwoldt, Walter, and Hamilton, Warren W. *An Analysis of Some of the Effects of Interage and Intergrade Grouping in an Elementary School.* Doctoral Dissertation, University of Southern California, January 1957.

Reports findings of a study on interage and intergrade classes in Torrance, California. Studied pupils' learning and personal adjustment in multigrade classes. Evaluated additional factors such as parental attitudes toward multigrade classes, teacher and administrator opinion of such classes, and pupil-pupil relationships within multigrade classes. Study favors multigrading.

Rehwoldt, Walter, and Hamilton, Warren W. "Why Group By Grade Levels?" *Grade Teacher* 76:18–19, 75, January 1959.

A consistent pattern of gains, greater than that of children in single-grade classes, was observed in multigrade classes in academic achievement, per-

sonal and social adjustment, and maturity and desirable behavior characteristics.

Theman, Viola. "Continuous Progress in School." *Childhood Education* 18:21–23, September 1941.
Recommends: (1) the teacher continue with a group for more than one year; (2) small groups of three or four teachers cooperatively plan the six or eight year program of a given group of children; (3) each group of children have an age range of several years (multi-age); and (4) grouping be based on ability to live together with profit to each student.

Weaver, J. Fred. "A Non-Grade-Level Sequence in Elementary Mathematics." *Arithmetic Teacher* 7:431, December 1960.
Reviews the report, "A Non-Grade-Level" by Glen Heathers and Samuel Steinberg and gives seventeen major levels of their non-grade-level sequence.

Weiss, Bernard J. "Reading: Blind Alleys and Fruitful Byways." *Education* 84:529–532, May 1964.
Discusses attempts to improve reading instruction such as organizational changes (nongraded primary, team teaching, "levels" approach by reading achievement); methods; and materials and aids (workbooks, laboratories, junior-edition periodicals, etc.).

Wolfson, Bernice J. "A Look at Nongradedness." *Elementary English* 42:455–457, April 1965.
Advocates multi-age classrooms and "adapting curriculum and instruction to foster both individual and group development." Cites research by John Goodlad, Robert Anderson, Louis DiLorenzo and Ruth Salter. Gives a list of minimal conditions of nongradedness; and discusses the individualization of instruction.

Wolfson, Bernice J. "Multi-Grade Classes." *Elementary English* 38:590, December 1961.
Describes Torrance Unified School District, California, volunteer program of multigrade grouping in twenty-six of its thirty elementary schools. Warren Hamilton, coauthor of the original study, says the multigrade pupils demonstrated greater personal and social growth.

Selected Bibliography

The Self-Contained Classroom

Analysis of a Team Teaching and of a Self-Contained Homeroom Experiment. Dearborn, Michigan: Public School District. 1962.
Account of experiment in Detroit, Michigan.

Anderson, Robert H. "Organizing Groups for Instruction." *Individualizing Instruction,* 61st Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, 61:239–264, 1962, Part 1.
Gives historical background of ways of organizing classes. Includes discussion of self-contained classroom.

Association for Supervision and Curriculum Development. *The Self Contained Classroom.* Washington, D.C.: the Association, NEA, 1960.
Collection of articles advocating the self-contained classroom.

Badger, E. M. and Covell, E. M. "Teaching Music in the Self-Contained Classroom: Opinions Differ." *NEA Journal* 55:16–18, May 1966.
Gives two views of issue.

Bahner, John M. "Team Teaching in the Elementary School." *Education* 85:337–341, February 1965.
Points out strengths of the self-contained classroom and of departmentalization as claimed by their advocates. Says team teaching combines advantages of both plans.

Bennett, H. K. "Making the Transition Requires Administrative Planning, Courage, and Patience." *Nation's Schools* 49:60–65, January 1952.
Describes transition from a departmentalized elementary plan to a self-contained classroom arrangement at Dearborn, Michigan.

Brown, B. Frank. "Schools of Tomorrow—Today." *Bulletin of NASSP* 46:164–166, May 1962.
Advocates schools move from the self-contained classroom to the self-contained school, from gradedness to non-gradedness, from grouping of children toward their ungrouping, from grouping for all to solitude for many, and from education in the mass to education by appointment.

Burnsworth, C. C. "Self-Contained Classrooms Reconsidered." *Music Educators Journal* 48:41–42, November 1961.
Questions the practicality of music education in the self-contained classroom with the regular teacher.
Also see views expressed in Music Educators Journal 43:36–38, February 1957; 48:132–138, February 1962; 52:62–64, September 1965; 52:67–68, November 1965; and *NEA Journal* 55:16–18, May 1966.

Coffin, G. C. *The Effect of Departmental Teaching on Academic Achievement of Children in Grades Four, Five, and Six.* Doctoral Dissertation, University of Connecticut, 1963. Also in *Dissertation Abstracts* 24:4498.
Concluded there was no significant difference in the academic achievement of 590 fourth, fifth, and sixth grade pupils when participating in either a departmentalized or self-contained program. Reports pupils,

teachers, and parents who participated in departmentalized plan enjoyed it and would like to continue.

Dean, Ray B. "Team Teaching in the Elementary Schools." *American School Board Journal* 145:5–6, December 1962.
Opposes self-contained classroom. Describes team teaching plan in effect for thirty-two years in Sacramento, California.

Department of Elementary School Principals. "1954–1962 Resolutions." *National Elementary Principal* 42:33–48, January 1963.
Says the self-contained classroom is the best basic unit of organization yet devised.

Drummond, Harold. "Team Teaching: An Assessment." *Educational Leadership* 19:160–165, December 1961. Also in *Education Digest* 27:5–8, February 1962.
Gives examples of five meanings of the term "team teaching." Notes that the cost of team teaching personnel need not be higher than costs of a self-contained classroom even if differential salary scales are used for team members.

Echternacht, Charles and Gordon, Virginia. "Breaking the Lock Step in Arithmetic." *Arithmetic Teacher* 9:86–89, February 1962.
Describes changing arithmetic instruction from a self-contained classroom arrangement in grades 4–6 to a Joplin or departmental plan at Park School, San Mateo, California.
Also see further readings on Joplin Plan in arithmetic in *Elementary School Journal* 9:86–89, February 1962; *Arithmetic Teacher* 10:12–17, January 1963; and *Dissertation Abstracts* 22:2247.

Fordell, Patrick. "Self-Contained Classroom in Operation." *Nation's Schools* 49:55–57, January 1952.
Cites advantages of self-contained classroom.

Gibb, E. C. and Matala, Dorothy. "Study on the Use of Special Teachers of Science and Mathematics in Grades Five and Six." *School Science and Mathematics* 62:565–85, November 1962.
Describes a study of the merits of the use of special teachers in science and mathematics as compared with the use of one teacher in a self-contained classroom.

Goldberg, Miriam, *et al. The Effects of Ability Grouping.* New York, N.Y.: Teachers College Press, 1966.
Assesses the effects of ability grouping on the academic and personal-social learning of elementary school students. Findings raise some serious questions about the adequacy of the one-teacher classroom, especially for able pupils.

Halliwell, Joseph W. "Comparison of Pupil Achievement in Graded and Nongraded Primary Classrooms." *Journal of Experimental Education* 32:59–64, Fall 1963. Included in Chapter 2.
After a study of approximately 150 primary pupils in a nongraded unit and 150 in a graded self-contained unit, researcher concluded that a nongraded approach to the teaching of reading and spelling was most effective.

Hamalainen, Arthur E. "Some Current Proposals and Their Meaning." *Educational Leadership* 16:271–274, February 1959. Included in Chapter 7.
Gives pros and cons of departmentalization in the elementary school. Evaluates the self-contained classroom.

Heathers, Glen. "The Role of Innovation in Education." *National Elementary Principal* 43:9–14, September 1963.
Gives four claimed features of self-contained classroom and shows how they are challenged by new forms of classroom organization.

Hillson, Maurie. *Change and Innovation in Elementary School Organization.* New York: Holt, Rinehart and Winston, 1965.
A selection of readings concerned with ability grouping, departmentalized and semi-departmentalized plans, team teaching, dual progress, multigrading, and nongrading.

Hood, Adeline. "A Junior-High Division in the Elementary Schools." *Clearing House* 29:460–462, April 1955.
Describes growth and development of junior high students. Recommends a semi-self-contained class in the elementary school to meet the needs of students of grades 7 and 8.

Jackson, Joseph. "Analysis of a Team Teaching and of a Self-Contained Homeroom Experiment in Grades Five and Six." *Journal of Experimental Education* 32:317–331, Summer 1964.
Analyzed results from two teaching arrangements. Author labels one plan "team teaching," however, it is actually departmentalization. Used control and experimental groups. Concluded team teaching was beneficial.

Keliher, Alice V. "Team Teaching." *High Points.* 44:65–68, May 1962.
Expresses fear that team teaching is "band wagon." Calls for research studies. Presents case for self-contained elementary classroom organization.

Kemeny, John G. "The Mathematically Talented Student." *Bulletin of NASSP* 47:26–40, April 1963.
Describes the ways the imagination of mathematically talented grade-school students can be captured. Suggests it may be necessary to use arithmetic specialists in the graded school.

Koopman, G. Robert. "A Natural Pattern for Child Growth and Learning." *Nation's Schools* 49:50–54, January 1952. Also see *NEA Journal* 47:18–20, January 1958.
Recommends self-contained classroom for the elementary school.

Koury, Rose. "Elementary School Organization . . . What Direction Shall It Take?" *Education Briefs No. 37.* U. S. Department of Health, Education, and Welfare, Office of Education, 1960.
Gives a historical view of elementary school organization, current practices and experiments, and an evaluation of departmentalization and self-contained classrooms.

Kowitz, Gerald T. and Wahlferd, G. H. "The Gifted Child." *Overview* 3:37–39, August 1962.
Says programmed instruction gives support to the self-contained classroom in the elementary school.

Lambert, Philip, *et al.* "A Comparison of Pupil Adjustment in Team and Self-Contained Organizations." *Journal of Educational Research* 58:311–314, March 1965. Also in *Journal of Experimental Education* 33:217–224, Spring 1965.
After two-year study with 349 elementary students concluded there are no effects on pupil adjustment from either team or self-contained organization or else the personality scales used are not sensitive to such differences. Spring, 1965 article reports multigrade teams were formed for grades 1–3

and 4–6. Found indications that achievement improved under a team organization that had been functioning longer than a year.

Lounsbury, John H. and Douglass, Harl R. "Recent Trends in Junior High School Practices." *Bulletin of NASSP* 49:87–98, September 1965.
Reports increase in departmentalization.

Miel, Alice. "The Self-Contained Classroom: An Assessment." *Teachers College Record* 59:282–291, February 1958.
Gives pros and cons. Makes a case for self-contained classroom.

Moorhouse, William F. "Interclass Grouping for Reading Instruction." *Elementary School Journal* 64:280–286, February 1964.
Reports 1958 study in Laramie, Wyoming, of interclass grouping in reading in grades 4–6 in self-contained classrooms and in a Joplin Plan. Researcher suggests "Hawthorne Effect" may account for some gains in the experimental group in the early part of the study that did not exist after the initial motivation passed.

Morgan, Elmer F., Jr. and Stucker, Gerald R. "The Joplin Plan of Reading vs. a Traditional Method." *Journal of Educational Psychology* 51:69–73, April 1960.
Describes research using ninety matched pairs of fifth- and sixth-graders in a rural school. States pupils grouped by the Joplin Plan achieved significantly more than did pupils taught in the self-contained class.

National Education Association, Project on Instruction Report. *Planning and Organizing for Teaching.* Washington, D.C.: the Association, 1963. pp. 53–92.
Analyzes vertical organization in a school, graded, multigraded and nongraded structures. Also analyzes the horizontal organization including achievement grouping, ability grouping, self-contained classroom, team teaching and departmentalization.

National Education Association. *Project on Instruction: Schools for the Sixties.* New York: McGraw-Hill Book Co., 1963. pp. 94–96.
Points out possibilities for continuity and relatedness of learning inherent in self-contained organization. Says this is not its exclusive possession. Encourages flexibility and creativeness in finding and using means to attain this end.

Powell, William R. "The Joplin Plan: An Evaluation." *Elementary School Journal* 64:387–392, April 1964. Also see articles in *Elementary School Journal* 65:38–43, October 1964; *Journal of Educational Research* 55:567, August 1962; and *Dissertation Abstracts* 26:4342 and 25:1780.
Report of a study of reading achievement in Joplin or departmental plan and self-contained classrooms with fourth-, fifth-, and sixth-grade pupils. There were no significant differences in reading achievement.

Roff, Rosella. "Grouping and Individualizing in the Elementary Classroom." *Educational Leadership* 15:171–175, 1957.
Points out difficulties a teacher experiences in a self-contained classroom in trying to meet individual needs.

Sanders, David C. "School Organization—How Do You Decide?" *National Elementary School Principal* 42:25–28, September 1962.
Gives criteria which help administrators and staffs decide on school organization.

Shane, Harold G. and Polychrones, James G. "Elementary Education Organization and Administration." *Encyclopedia of Educational Research.* New York: Macmillan Company, 1960. pp. 421–430.
Summarizes developments in structure and function of elementary school during the Fifties. Bibliography of 39 entries accompanies discussion of ability grouping, ideal class size, self-contained classrooms, and departmentalized classrooms.

Shaplin, Judson T. "Team Teaching." *Saturday Review* 44:54, 55, 70, May 20, 1961.
Gives three alternatives to the self-contained classroom. Discusses advantages and disadvantages of team teaching.

Smith, Norvel L. "Primary Schools and Home School Relationships." *Educational Administration and Supervision* 42:129–133, March 1956.
Concludes self-contained primary unit enriches school-home relationships. Says changes in school policies and procedures will have to be made to take advantage of the potential of self-contained classroom.

Spivak, Monroe L. "The Junior High: Departmentalized or Self-Contained?" *Phi Delta Kappan* 38:134–135, January 1957. Also see article in Chapter 7.
Research evidence on forty-one matched pairs of seventh- and ninth-graders shows students do better in a self-contained class organization in junior high than those in a departmentalized arrangement.

Tillman, Rodney. "Self-Contained Classroom: Where Do We Stand?" *Educational Leadership* 18:82–84, November 1960.
Cites seven promising practices promoted by the self-contained classroom.

"Toward Improved School Organization: Further Look at Horizontal Structure, The Self-Contained Classroom." *National Elementary Principal* 41:93–115, December 1961.
Gives rationale, organization, administrative responsibilities, and professional reactions to the self-contained classroom.

Also check bibliography of Chapter 2 for readings on graded self-contained classrooms.

Selected Bibliography

Departmentalization and Semi-Departmentalization

Anderson, Lorena A. and Benson, Eunice P. "Organization of an English Department." *English Journal* 48:145–147, March 1959.
Suggests a way to organize a high school English department.

Anderson, Richard. "Case for Non-Graded Homogeneous Grouping." *Elementary School Journal* 62:193–197, January 1962.
Gives an account of nongraded homogeneous grouping for some classes and teacher specialization and departmentalization in others in the upper elementary school at East Brunswick, N.J.

Anderson, Robert H. "Organizing Groups for Instruction." *Individualizing Instruction*, 61st Yearbook of the National Society for the Study of Education, Part I. Chicago: University of Chicago Press, 1962. pp. 239–264.
Gives historical background of ways of organizing classes. Includes discussion of departmentalization.

Anderson, Robert H. "Some Types of Cooperative Teaching in Current Use." *National Elementary Principal* 44:22–26, January 1965. Included in Chapter 8.
Briefly discusses departmentalization and self-contained arrangements.

Bahner, John. "Team Teaching in the Elementary School." *Education* 85:337–341, February 1965.
Points out strengths of the self-contained classroom and of departmentalization as claimed by their advocates. Says team teaching combines advantages of both plans.

Barnes, R. E. "Survey of Status and Trends in Departmentalization in City Elementary Schools." *Journal of Educational Research* 55:291–292, March 1962.
Found the majority of 806 city elementary schools had not increased departmentalization in grades 1–6 during 1959. A counter trend was noted in schools in smaller cities where increasing departmentalization was noted.

Bellagamba, L. P. *A Study of Changes in Five Selected Junior High Schools, 1957–1962.* Doctoral Dissertation, Columbia University, 1963. Also in *Dissertation Abstracts* 24:5110.
Found increased departmentalization and grouping at the expense of block classes during the five-year period of the study.

Bennett, H. K. "Making the Transition Requires Administrative Planning, Courage, and Patience." *Nation's Schools* 49:60–65, January 1952.
Describes transition from a departmentalized elementary plan to a self-contained classroom arrangement at Dearborn, Michigan.

Bishop, D. W. "Role of the Local Administrator in Reorganizing Elementary Schools to Test a Semi-Departmentalized Plan." *Journal of Educational Sociology* 34:344–348, October 1962.

Gives details of Dual Progress Plan at Ossining and Long Beach, New York. Teachers are full-time specialists in one of six curricular areas.
Also see *Arithmetic Teacher* 6:302–305, December 1959; *Educational Leadership* 18:89–91, November 1960; *Educational Forum* 25:271–276, March 1961; *Journal of Educational Sociology* 34:349–354, April 1961; and *Science Education* 50:39–43, February 1965.

Broadhead, Fred C. "Pupil Adjustment in the Semi-Departmental Elementary School." *Elementary School Journal* 60:385–390, April 1960. Also see reference by A. Hugh Livingston.
Reports results with fifth graders in Tulsa, Oklahoma in semi-departmental arrangement.

Carson, Roy H. and Thompson, Jack M. "Joplin Plan and Traditional Reading Groups." *Elementary School Journal* 65:38–43, October 1964.
Reports experiment in Joplin (departmental) arrangement for reading instruction.
Also see *Journal of Educational Research* 52:228–231, February 1959; 56:317–321, February 1963; *Elementary English* 30:305–307, May 1959; 33:102–104, February 1965; *Elementary School Journal* 55:100–103, October 1954; 64:280–286, February 1964; *Journal of Experimental Education* 31:273–278, March 1963; *Saturday Evening Post*, October 27, 1957; and article by Richard H. Hart in Chapter 11 of this book for further discussions of the Joplin plan of reading instruction.

Chalender, R. E. "Desirable Degrees of Subject Departmentalization." *Bulletin of NASSP* 47:18–19, October 1963.
Summarizes one junior high staff's thinking on subject of departmentalization. Recommends it be used in music, art, homemaking, industrial arts, and physical education. Says self-contained classroom is needed in other subjects.

Coffin, G. C. "Are Your Elementary Grades Properly Organized?" *School Management* 5:61–62, December 1961. Also see *Dissertation Abstracts* 24:4498.
Found there was no significant difference in academic achievement of 4–6th grade pupils in North Reading, Massachusetts when participating in either a self-contained or departmental program.

Cox, Donald H. "The Cochrane Modification of the Joplin Reading Plan." *Canadian Education and Research Digest* 3:28–34, March 1964.
Reports Joplin or departmental plan for reading instruction has achieved a degree of success after three years of usage.

Davis, O. L. and Tracy, Neal H. "Arithmetic Achievement and Instructional Grouping." *Arithmetic Teacher* 10:12–17, January 1963. Also see *Elementary School Journal* 9:86–89, February 1962; and *Dissertation Abstracts* 22:2247 for dissenting views.
Compared effects of two grouping plans on arithmetic of 393 North Carolina pupils in grades 4–6. Report is unfavorable to Joplin or departmental plan.

Douglass, M. P. "Reading and Nongrading in the Elementary School." *College Reading Conference Yearbook*, 1962. pp. 85–95.
Traces departmentalization back to Gary Plan of 1907 and up to Joplin Plan. Gives assumptions of departmentalization.

Gibb, E. Clenddine and Matals, Dorothy C. "Study on the Use of Special Teachers of Science and Mathematics in Grades Five and Six." *School Science and Mathematics* 62:565–585, November 1962.
Describes study of the merits of the use of special teachers and departmentalization in science and mathematics as compared with the use of one teacher in a self-contained classroom.

Grant, Lester J. "The Principal Studies His Leadership Role." *Bulletin of NASSP* 43:61–64, February 1959.
Discusses roles of department head in curriculum improvement and in-service education.

Gumaer, H. T. "New Jersey Junior High Schools Question Emphasis on Departmentalization." *Bulletin of NASSP* 42:118–120, November 1958.
Reports status of departmentalization in New Jersey junior high schools. Gives recommendation to help junior high schools move away from this organization.

Gruman, Allen J. "Improving Instruction Through the Use of Department Heads." *California Journal of Secondary Education* 30:167–169, March 1955.
Gives desirable qualities of effective secondary school department heads.

Hagaman, Harlan. "Shall We Departmentalize?" *Nation's Schools* 28:30, July 1941.
Gives individual opinions of advantages and disadvantages of departmentalization.

Hanson, Earl H. "Let's Use Common Sense to End the Reading War." *NEA Journal* 51:41–43, February 1962.
Discusses grouping within the classroom, the Joplin Plan, and the individualized plan of reading instruction.

Hart, H. C. "Classroom Structures Rapidly Changing: Departmentalized Instruction." *Education* 86:200, December [illegible]
Says departmentalization has been extended to primary and intermediate years because of the introduction of modern mathematics and language. Many of the regular teachers are not equipped to handle this instruction.

Heathers, Glen. "Field Research on Elementary School Organization and Instruction." *Journal of Educational Sociology* 34:338–343, April 1961.
Discusses projects established to test experiments such as departmentalization, ability grouping, team teaching, cross grade grouping, etc.

Hillson, Maurice. *Change and Innovation in Elementary School Organization.* New York: Holt, Rinehart, and Winston, 1965.
Collection of readings on departmental and semi-departmental plans, team teaching, dual progress, nongrading, etc.

Jensen, Elizabeth S. "The Department Chairman: Why He Often Quits with Pleasure." *Clearing House* 23:284–286, January 1949.
Gives problems of high school English Department head and ways of resolving them.

Livingston, A. Hugh. "Does Departmental Organization Affect Children's Adjustment?" *Elementary School Journal* 61:217–220, January 1961.
Describes research study comparing the effects of semi-departmentalization and of the self-contained classroom on the personal and social develop-

ment of students in grades 1–5. Evidence reveals semi-departmental organization does not hinder the pupils' personal and social development.

Lounsbury, John H. and Douglass, Harl R. "A Decade of Change in Junior High Practices." *Clearing House* 40:456–458, April 1966.
Shows departmentalization was characteristic of junior high schools in study.

Madon, Constance. "The Middle School: Its Philosophy and Purpose." *Clearing House* 40:329–330, February 1966.
Describes philosophy of middle school (for grades 5–8). Partial departmentalization cited as one of the advantages.

National Education Association. "Departmentalization in Elementary Schools: Summary." *NEA Research Bulletin* 44:27–28, February 1965.
Located 97 large school systems that used departmentalization in 1964–65 in one or more elementary schools. Plan was most frequently used in grades 4–6 but was reported to some degree in every grade. Describes practices in Tulsa, Oklahoma; West Hartford, Connecticut; and Cleveland, Ohio.

National Education Association. Research Division, and American Association of School Administrators. *Departmentalization in Elementary Schools.* Washington, D.C.: the Association, Circular 7, October 1965. Details of study in *NEA Research Bulletin* 44:27–28, February 1965.

O'Reilly, R. C. "Generalist, Departmentalist, and Specialist." *Education* 83:295–297, January 1963. Also see *School Management* 4:38–40, December 1960.
Assesses role of generalist, departmentalist, and specialist in the elementary school. Concludes generalist has highest potential for success.

"Research on Departmentalization." *National Elementary Principal* 40:89, September 1965.
Reports results of three-year study of departmentalized and self-contained classrooms in grades 4–6 in Montgomery County, Maryland, Public Schools. Found departmentalization brought no gains in academic achievement. Pupils liked it and teachers felt they had an opportunity to exercise their skills in area of specialization. There was no significant difference in students' expressed perceptions of themselves as learners or in their feelings of satisfaction with their school situation between the two arrangements.

Rinker, Floyd. "The Department Head." *Bulletin of NASSP* 34:48–53, December 1950.
Enumerates duties of high school department head.

Robinson, G. "Principals' Opinions About School Organization." *National Elementary Principal* 41:39–42, November 1961.
NEA surveyed 721 elementary principals to learn what practices they favored. Responses indicated they favored an elementary school with 400–500 pupils in self-contained classrooms.

Shane, Harold G. and Polychrones, James Z. "Elementary Education—Organization and Administration." *Encyclopedia of Educational Research,* New York. Macmillan Company, 1960. pp. 421–430.
Summarizes developments in structure and function of elementary schools. Discusses self-contained classrooms and departmentalization.

Spivak, M. L. "The Junior High: Departmentalized or Self-Contained?" *Phi Delta Kappan* 38:134–135, January 1957.
Reports research evidence favorable to self-contained 7th and 9th grade arrangement.

Stephenson, C. E. "Departmental Organization for Better Instruction." *Bulletin of NASSP* 45:9–14, December 1961.
Discusses the role of the administrator, the department head, and the teacher in high school departmental organization. Attempts to show what departmental organization ought to be.

Stoddard, George D. "Dual Progress Plan after Two Years," in *Frontiers of Elementary Education.* (Edited by Vincent J. Glennon). Syracuse, New York: Syracuse University Press, 1961. pp. 1–12.
Describes Dual Progress Plan which uses teachers who are specialists in curricular areas.

"Toward Improved School Organization: Further Look at Horizontal Structure." *National Elementary Principal* 41:93–115, December 1961.
Gives rationale, organization, administrative responsibilities and professional reactions to departmentalization, self-contained classroom, etc.

Waskin, Leon S. "Organizing for Curriculum Study." *Bulletin of NASSP* 43:41–45, February 1959.
Summarizes ways of organizing high school staff for curriculum study.

Also check bibliography of Chapter 6 and Chapter 11 for further readings on this subject.

Selected Bibliography

Team Teaching: The Elementary School

Adams, Andrew S. "Operation Co-Teaching: Dateline: Oceano, California." *Elementary School Journal* 62:203–212, January 1962.
Reports team teaching with fourth and sixth grades. Began as an alternative to double sessions and ended as a permanent practice. Found greater achievement, personality adjustment, and teacher response than in self-contained classroom.

Anderson, Robert H. "School-University Cooperation and the Lexington Project." *Journal of Educational Sociology* 34:882–86, April 1961.
Describes elementary school team teaching project in Lexington, Mass. The public school and Harvard University joined forces and author describes opportunities and problems that arose.

Anderson, Robert H. "Team Teaching." *NEA Journal* 50:52–54, March 1961. Also in *Education Digest* 26:5–7, May 1961. Reply by Anne Hoppock in *NEA Journal* 50:47–48, April 1961. Also see *Nation's Schools* 65:62–65, May 1960.
Defines team teaching and describes five programs: Franklin School in Lexington, Massachusetts; Norwalk Plan in Norwalk, Connecticut; University of Wisconsin Plan in Madison, Wisconsin; Jefferson County Plan in Colorado; and Evanston Plan in Illinois. Cites results, problems, and theoretical advantages of team teaching.

Bach, Frank and Murphy, Donald. *Team Teaching on the Elementary Level.* 16mm color film, Hollywood, California, Bailey Films, Inc., 6509 De Longpre Avenue. Also see *Library Journal* 89:320, January 15, 1964.
Explains purpose and methodology of elementary school team teaching. Traces motivations and plans for beginning it in Cashmere, Washington.

Bahner, John M. "Team Teaching in the Elementary School." *Education* 85:337–341, February 1965.
Advocates team teaching. Says the pattern combines all the advantages of the self-contained classroom and departmentalization.

Bair, Medill and Woodward, Richard. *Team Teaching in Action.* Boston: Houghton Mifflin, 1964.
Gives team teaching principles, characteristics, facilities, methods, and evaluation. Describes details of Lexington (Massachusetts) Project for third and fourth year pupils in Franklin and Estabrook Schools. Stresses teachers must exhibit a firm commitment to team teaching in order to have a successful program.

Beggs, David W. *Team Teaching: Bold New Adventure* (Edited by David W. Beggs, III) Indianapolis, Indiana: Unified College Press, Inc., 3600 Washington Blvd., 1964.
Collected essays on aspects of team teaching by twelve advocates from team supervisory, administrative, and teaching roles. Attempts to show how it fits into elementary, junior, and senior high schools.

Beggs, David W. and Buffie, Edward G. (Editors). *Independent Study.* Indiana University Press, 1965. pp. 51–82.
Describes independent study, team teaching facilities, and instructional materials for the elementary school.

Boutwell, W. D. "What's Happening in Education? What Is Team Teaching?" *PTA Magazine* 57:16–25, May 1963.
Gives the rationale behind team teaching as a new approach in elementary education. Gives illustrations from several school systems.

Bradley, P. A. "Individualized Instruction Through Cooperative Teaching and a Programmed Text." *National Elementary Principal* 43:46–49, May 1964.
Found team teaching in a large class, combined with individual study with a programmed text, did not result in significant differences.

Buechner, Alan C. "Team Teaching in Elementary Music Education." *Music Educators Journal* 50:31–55, November-December, 1963.
States team teaching offers tremendous possibilities for relating music to other fields of knowledge in a meaningful way.

Cunningham, Luvern L. "Keys to Team Teaching." *Overview* 2:54–55, October 1960. Also see *Elementary School Journal* 62:119, December 1961.
Analyzes some of the considerations in effective team teaching. Emphasizes the importance of team members.

Cunningham, Luvern L. "Team Teaching: Where Do We Stand?" *Administrator's Notebook* 8:1–4, April 1960.
Discusses reorganization of staff into teams. Describes four types: Team Leader; Associate; Master-Teacher–Beginning-Teacher; and Coordinate Team.

Cunningham, Luvern L. "Viewing Change in School Organizations." *Administrator's Notebook II:* September 1962. Also see *Administrator's Notebook II:* April 1960.
Entire issue is devoted to change in traditional school organization.

Darling, W. "Team Teaching: Wisconsin Improvement Program." *NEA Journal* 54:24–25, May 1965.
Points out difference between team teaching and practices that are mistaken for it. Gives four criteria and illustrates how each of these is met in the Wisconsin Improvement Program.

Dean, Ray B. "Team Teaching in the Elementary Schools." *American School Board Journal* 145:5–6, December 1962.
Opposes self-contained classroom. Describes team teaching plan in effect for 32 years in Sacramento, California.

Drummond, Harold. "Team Teaching: An Assessment." *Educational Leadership* 19:160–165, December 1961. Also in *Education Digest* 27:5–8, February 1962.
Gives examples of five meanings of the term "team teaching." Notes that the cost of team teaching personnel need not be higher than costs of a self-contained classroom even if differential salary scales are used for team members.

Fink, D. R., Jr. "Selection and Training of Teachers for Teams." *National Elementary Principal* 44:54–59, January 1965.
Urges careful analysis of requirements for selecting various members of teaching teams. Recommends training for team teaching.

Fierster, L. *A Study of Organizational Forms of Team Teaching in the Public Elementary Schools in the United States.* Doctoral Dissertation, Teachers College, Columbia University, 1964. Also in *Dissertation Abstracts* 25:225.

Located 49 schools in U.S. emphasizing some form of team teaching. Defines term and points out two categories: hierarchical and peer cooperative.

Fischler, Abraham S. "The Use of Team Teaching in the Elementary School." *School Science and Mathematics* 62:281–288, April 1962. Also see *Science Education* 46:406–415, December 1962.

Describes team teaching as a way of organizing for change. Gives rationale for team planning. Cites curriculum development involved, problems to be resolved, and staffing considerations.

Ford Foundation. *Time, Talent, and Teachers.* New York: the Foundations, 1960.

Briefly describes flexible school organization, team teaching, electronics, and staff utilization projects in elementary and secondary schools. Included are schools in Lexington and Newton, Massachusetts and in Evanston, Illinois.

"Four in One." *Newsweek* 62:100, November 25, 1963.

Gives an account of large classroom accommodating four teachers and students at Dilworth Elementary School in San Jose, California.

Gilbert, Edward H. "A Design for School Improvement." *Administrator's Notebook* 7:1–4, May 1959.

Describes various patterns of school organization being tried out under the School Improvement Program in the Midwest. Includes brief description of team teaching at fifth and sixth grade level at Price Elementary School, Fort Wayne, Indiana.

Gilberts, Robert D. *The Interpersonal Characteristics of Teaching Teams.* Doctoral Dissertation, University of Wisconsin, 1961. Also in *Dissertation Abstracts* 22:1882.

Found compatibility among members of teaching teams did not affect the professional quality of work in the classroom but did relate to informal relationship outside class. Expressions of teacher-satisfaction did not relate to compatibility.

Goodlad, John I. and Anderson, Robert H. *The Nongraded Elementary.* (Revised Edition). New York: Harcourt, Brace and World, Inc., 1963. pp. 67–68, 97–99, 129–130, 211, 223.

Describes development of the nongraded elementary school. Includes material on team teaching.

Gross, Calvin. "Team Teaching in Pittsburgh." *Education Digest* 28:12–14, November 1963.

Gives an account of a 1960 team teaching experiment in ten Pittsburgh schools in kindergarten through high school. Describes role of team members.

Hamilton, Andrew. "Is Team Teaching for Your Child?" *PTA Magazine* 58:4–6, May 1964. Also in *Reader's Digest,* June 1964.

Discusses ways of organizing staff, curriculum, space, and equipment. Describes team teaching in Lexington, Massachusetts; Evanston, Illinois; Claremont, California; etc.

Hayes, Charles. "Team Teaching in Culturally Deprived Areas." *National Elementary Principal* 44:60–65, January 1965.
A team mother aide and male teachers are features of a project in Pittsburgh. A mental health team and an adult evening school help bring the home and school closer together and closer to the students' needs.

Heathers, Glen. "Field Research on Elementary School Organization and Instruction." *Journal of Educational Sociology* 34:338–343, April 1961.
Discusses projects established to test new plans for organizing and conducting instruction in the elementary school. Includes specialist teaching, teaching teams, departmentalization, ability grouping, cross-graded grouping, etc.

Heathers, Glen. "Research on Implementing and Evaluating Cooperative Teaching." *National Elementary Principal* 44:27–33, January 1965.
Gives procedures for researching cooperative teaching and evaluating results. Describes methods of introducing the program into a school. Cites typical weaknesses of studies. Specific and helpful article.

Hoffa, H., and Fawcett, T. "Team Teaching and Art Teaching." *School Arts* 62:18–20, February 1963.
Recommends art educators view team teaching as something to be undertaken cautiously. Includes description of Lexington's team plan.

Jackson, Joseph. "Analysis of a Team Teaching and of a Self-Contained Homeroom Experiment in Grades Five and Six." *Journal of Experimental Education* 32:317–322, Summer 1964.
Found a team of teachers can adjust the work much more to the needs of a student than an individual teacher can. Experiment carried on in Dearborn, Michigan.

Jaffa, N. Newbert and Brandt, Richard. "An Approach to the Problems of a Downtown School." *National Elementary School Principal* 44:25–28, November 1964.
Account of attempts of a Baltimore elementary school faculty to increase the achievement of all the pupils through nongraded organization, team teaching, and in-service education.

Keliher, Alice V. "Team Teaching." *High Points* 44:65–68, May 1962.
Gives reasons for viewing large classes taught by a team skeptically at the elementary school level.

Keppel, Francis and Perry, Paul A. "School and University: Partners in Progress." *Phi Delta Kappan* 42:174–180, January 1961.
Description of the Franklin Elementary School Project in Lexington, Massachusetts.

Lalaime, Arthur. "Elementary Schools Designed for Team Teaching." *Audio-Visual Instruction* 7:540–541, October 1962.
Briefly describes team teaching facilities at Naramahe Elementary School at Norwalk, Connecticut and Flowing Wells Elementary School at Tucson, Arizona.

McMahon, Eleanor. "Principals' View on Team Teaching." *National Elementary Principal* 44:34–43, January 1965.
On basis of interviews with ten elementary principals, author determined their experiences with team teaching were beneficial to student learning, teacher development, and administrative efficiency.

Morlan, John. "Think Twice About Team Teaching." *Instructor* 73:65, 72, September 1963.
Gives six factors that should be examined prior to adopting a team teaching program.

Morlan, John. "The Team Approach to Large-Group Instruction." *Audiovisual Instruction* 9:520–523, October 1964.
Gives guidelines for team-teaching and new approaches which are effective in implementing it.

Morse, Arthur D. (producer). "The Influential American." *CBS News.* New York: 485 Madison Avenue. Transcript available.
TV program presented November 13, 1960 describes team teaching at Franklin School in Lexington, Massachusetts.

National Education Association, Department of Elementary School Principals. "Team Teaching." *Elementary School Organization: Purposes, Patterns, Perspectives.* Yearbook. Washington, D.C.: the Department, 1961. pp. 78–92, 115–125.
Discussion of school organization including team teaching. Gives a historical description of graded and nongraded schools.

National Education Association. Project on Instruction Report. *Planning and Organizing for Teaching.* Washington, D.C.: the Association, 1963. p. 190.
Analyzes vertical school organization (graded, nongraded, and multigraded school organization) and horizontal organization (team teaching, self-contained classroom, departmentalization, etc.).

National Education Association. *Project on Instruction: Schools for the Sixties.* New York: McGraw-Hill Book Co., 1963. pp. 71–98.
Overview volume of publications of Project on Instruction. Describes grading, nongrading, team teaching, etc.

"Planning and Operating the Middle School." *Overview* 4:52–55, March 1963.
Combined upper elementary grades (5–6) with lower secondary grades (7–9) at Bedford School in Mount Kisco, N.Y. Subject matter ungraded as rapidly as possible. Organized around teaching teams.

"Plan Takes Lockstep and Buries It in Space." *Nation's Schools* 72:86–89, October 1963.
Reports ungrading and team teaching in the Josiah Haynes Elementary School, Sudbury, Massachusetts. School was planned and built for ungrading and team teaching.

Profiles of Significant Schools: Heathcote Elementary School, Scarsdale, N. Y. New York: Educational Facilities Laboratories, Inc., 1960.
Describes physical plant. Plan implements nongrading and team teaching.

Reasoner, Robert W., and Wall, Harvey R. "Developing Staff Interaction in Team Teaching." *National Elementary Principal* 44:84–86, January 1965.
Points out the principal is vital to team teaching success through a careful selection of teachers, assistance in planning and evaluating, and leadership in stimulating creative flexibility.

Roberts, G. M. *Case Studies of Two Nongraded Elementary School Programs.* Doctoral Dissertation, University of Tennessee, 1964. Also in *Dissertation Abstracts* 25:2830.
Recommends nongrading and team teaching on the basis of a study of reading performance.

Ross, Charles Lee. *An Experiment in the Reorganization of Instruction in the First Grade.* Doctoral Dissertation, University of Tennessee, 1964. Also in *Dissertation Abstracts* 24:651.
Evaluated Morristown team teaching plan. Two groups compared: a traditional group which attended first grade on a full-day basis with one teacher and an experimental group which attended on a half-day basis with two teachers. Both groups generally achieved equally well except in arithmetic computation.

Shaplin, Judson T. "Team Teaching." *Saturday Review* 44:54–55, 70, May 20, 1961.
Recommends team teaching as one way to improve the quality of instruction in the self-contained classroom. Gives the direction of team teaching.

Shaplin, Judson T. and Olds, Henry F., Jr. (editors). *Team Teaching.* New York: Harper and Row, 1964.
Advocates of team teaching discuss organization, administration, research, and public relations.

Slobodian, J. J. "Team Teaching Experiment Proves to Be Effective." *Ohio Schools* 42:27, February 1964.
Describes first grade team teaching experiment in three classrooms in North Lima Elementary School. Teachers are enthusiastic about the arrangement and they report the students responded well in reading, and were above the median on standardized tests.

Taylor, H. and Olson, K. "Team Teaching with Trainable Mentally Retarded Children." *Exceptional Children* 30:304–309, March 1964.
Reports inaugurating a team teaching program at Slover Special School in Fontana, California. Adapted recommendations for organizing team teaching in an elementary school to this special school.

"Toward Improved School Organization: Further Look at Horizontal Structure." *National Elementary Principal* 41:93–115, December 1961.
Gives rationale, organization, administration, and professional reactions to team teaching, departmentalization, self-contained classroom, etc.

Selected Bibliography

Team Teaching: Junior and Senior High School

And No Bells Ring. 16 mm. film. Commission for the Experimental Study of the Utilization of the Staff in the Secondary School, National Association of Secondary School Principals. Washington, D.C.: 1201 Sixteenth Street, N. W.; 2 reels.

Film in two parts presents recommendations of the "Trump Commission." Encourages secondary school experimentation. Gives basic ideas of team teaching, independent study, etc.

Anderson, Edward J. "Crackling Excitement in the School Corridors; Team Teaching at Wayland, Massachusetts." *Life* 54:78–84, March 22, 1963.

Advocate of team teaching describes high school program in Wayland, Massachusetts.

Also see *Journal of Secondary Education* 36:354–356, October 1961; *Nation's Schools* 65:83–91, April 1960; *Time* 78:42, October 20, 1961; and *Bulletin of NASSP* 46:123–126, January 1962; and 47:118–127, March 1963.

Anderson, Robert H. "Organizational Character of Education: Staff Utilization and Deployment." *Review of Educational Research* 34:455–469, October 1964.

Points out a school experiment usually simultaneously involves other changes. Nongrading, for example, stimulates interest in team teaching and other regrouping plans. Discusses team teaching, sub-professional personnel, the flexible school, nongrading and technology.

Anrig, Gregory R. "Promising and Perplexing Aspects of Large Group Teaching Experiments." *Bulletin of NASSP* 46:253–260, January 1962.

Gives pros and cons. Says team teaching allows the modern teacher to reach more students, receive more pay, and train nonprofessionals and aides by example and by precept. Hierarchies, however, might create tensions. Also says achievement levels are often disappointing in large groups.

Arnold, William. "Is Team Teaching the Answer?" *School and Society* 91:407–409, December 14, 1963. Also in *Education Digest* 29:20–21, March 1964.

Warns against jumping on the bandwagon. Indicates team teaching offers promising possibilities if there is a thorough preparation, planning, and coordination.

Baynham, Dorsey. "A School of the Future in Operation." *Phi Delta Kappan* 42:350–354, May 1961.

An account of Ridgewood High at Norridge, Illinois. This school has put all of the recommendations of the "Trump Commission" into operation including large and small group instruction, independent study, and team teaching.

Also see *School Management* 8:113, October 1964; *North Central Associa-*

tion Quarterly 40:208–213, February 1965; *Bulletin of NASSP* 45:273–274, January 1961; 46:105–122, January 1962; and 46:59–64, December 1962.

Baynham, Dorsey. "Selected Staff Utilization Projects in California, Georgia, Colorado, Illinois, Michigan, and New York." *Bulletin of NASSP* 46:15–98, January 1962.

Gives a sampling of projects being conducted in junior and senior high schools in six states as a part of the NASSP Committee on Staff Utilization. Describes experimentation with team teaching, preparation of teacher-specialists, use of technology, large and small group instruction, etc.

Beggs, David W. "Decatur-Lakeview Plan." *Overview* 3:42–43, 47–48, December 1962. Also see *Bulletin of NASSP* 44:254–256, January 1960; 45:85–92, January 1961; 46:193–202, January 1962; and *American School Board Journal* 148:21–22, May 1964.

Principal Beggs describes some of the major tasks in reorganizing the Decatur (Illinois) High School to meet recommendations of the "Trump Commission." Discusses adapting the system to traditional buildings, restructuring faculty duties, restructuring classes into large and small groups, obtaining community cooperation, and solving specific operational problems. Team teaching, large and small group instruction, independent study, multimedia teaching aids, flexible scheduling, and programmed instruction are some of the changes introduced.

Beggs, David W. *Team Teaching: Bold New Adventure.* (Edited by David W. Beggs, III). Indianapolis, Indiana: Unified College Press, Inc., 3600 Washington Blvd., 1964.

Collection of essays on aspects of team teaching by twelve people from team supervisory, administrative, and teaching roles. Attempts to show how team teaching fits into elementary, junior, and senior high schools. Writers are advocates of the team approach.

Beggs, David W. and Buffie, Edward G. (Editors). *Independent Study.* Bloomington, Indiana: Indiana University Press, 1965. pp. 1–67, 83–219.

Describes school programs, facilities, instructional materials, team teaching, and flexible scheduling.

Brown, B. Frank. *Appropriate Placement School: A Sophisticated Nongraded Curriculum.* West Nyack, N.Y.: Parker Publishing Co., Inc., 1965.

Gives details of the multiphased curriculum for primary, intermediate, junior, and senior high schools. Includes chapters on school buildings, the library, dropouts, and the disadvantaged student. Describes team teaching, nongrading, large and small groups, independent study, etc.

Brown, B. Frank. *Nongraded High School.* Englewood Cliffs, N.J.: Prentice-Hall, 1963.

Describes nongraded Melbourne High School organized in 1958. Includes discussion of team teaching.

Bush, Robert N. and Allen, Dwight W. *A New Design for High School Education.* New York: McGraw-Hill, 1964.

Presents theoretical framework of team teaching built on practice. Plan calls for teachers who diagnose what is to be learned and how and when it is attacked.

Corrigan, D. and Hynes, R. "Team Teaching: Proceed with Caution." *Clearing House* 39:312, January 1965. Also see *Social Education* 38:205–208, April 1964.

Discusses provisions and arrangements which should be made before beginning a team teaching program.

Costin, R., *et al.* "Six Years of Organization and Staff Utilization." *Bulletin of NASSP* 46:122–131, October 1962.
Reports practices at O'Farrell Junior High in San Diego, California. Uses flexible scheduling and utilizes teacher proficiencies, community resources, and technological devices.

Hanson, L. F. "School Using Programmed Materials." *Audiovisual Instruction* 8:101–103, February 1963. Also see *PTA Magazine* 56:16–17, March 1962.
Grade level listing of school systems using programmed materials. Useful for planning independent study activities.

Howe, Harold. "Needed: A Radical Change." *Saturday Review* 43:73–74, September 17, 1960. Also see *Journal of Secondary Education* 37:353–361, October 1962.
Advocates changes along the line of the Trump Plan.

Howe, Harold. "Experimentation at Newton." *California Journal of Secondary Education* 35:117–118, February 1960. Also see *Bulletin of NASSP* 44:122–138, January 1960; 44:201–205, April 1960; and *Saturday Review* 48:48–50, January 16, 1965.
Describes large-group instruction at Newton High in Newton, Massachusetts.

King, Jonathan. "In Which the Bell Tolls." *Saturday Review* 43:84–85, 99–100, October 15, 1960.
An Educational Facilities Laboratories official describes changes in form and structure of education and its buildings which contribute to transformation in schools. Gives three approaches to school design and gives examples of facilities found in several school systems. Discusses grouping, team teaching, and TV teaching.

"Locus of Change: Staff Utilization Studies." *Bulletin of NASSP* 46:1–323, January 1962.
Entire issue devoted to experiments including team teaching, independent study, nongrading, etc.

Lovetere, J. P. "Instructional Team: An Approach to a More Effective Junior High School Organization." *Clearing House* 41:301–303, January 1967.
Describes plan devised to reduce the number of exposures that junior high students and teachers have without losing the advantages of departmentalization. Organization is based on instructional teams.

Manlove, Donald C. and Beggs, David W. *Flexible Scheduling.* Bloomington, Indiana: Indiana University Press, 1965.
Shows how to use large-group, small-group, and independent study to achieve more flexible scheduling.

Peterson, C. H. "Team Teaching in the High School." *Education* 85:342–347, February 1965. Also in *Education Digest* 30:22–24, May 1965. Also see *American School Board Journal* 145:11–13, October 1962; and 149:15–17, November 1964.
Says team teaching helps solve certain instructional and curricular problems such as scheduling, individualized instruction, class size, effective use of time and talent, independent study, and chances for recognition.

Profiles of Significant Schools: Schools for Team Teaching. New York: Educational Facilities Laboratories, Inc., 1960.
Describes team teaching, schools being built for it and schools planned for the future.

Profiles of Significant Schools: High Schools, 1962. New York: Educational Facilities Laboratories, Inc., 1961.
Gives examples of high schools designed to facilitate team teaching.

Sand, Ole, *et al.* "Report on Some National Studies in Education." *Bulletin of NASSP* 47:163–181, April 1963. Also see *Bulletin of NASSP* 47:120–123, May 1963.
Director of NEA Project on Instruction discusses instructional issues and gives recommendations. Includes practices and trends in team teaching.

Shaplin, Judson T. "Team Teaching." *Saturday Review* 44:54–55, 70, May 20, 1961.
Gives three alternatives to the self-contained classroom. Discusses difficulties of the team teaching approach and many advantages including specialization in teaching, grouping of students, etc.

Shaplin, Judson T. and Olds, Henry F., Jr., *et al. Team Teaching.* New York: Harper and Row, 1964. Excerpt: "Antecedents of Team Teaching." *School and Society* 91:393–407, December 14, 1963.
Says criticism of schools reached a high point in 1953, and continues, but that out of this has emerged a climate favorable to change. Discusses five areas of change in relationship to team teaching: recruitment, training and career prospects of teachers; organization of schools into larger units; revisions of the curriculum; grouping for instruction, and development of technological aids.

Sharkan, W. W. *An Evaluation of the Team Organization Plan of Staff Utilization in Relationship to the Educational Development of Students in the Junior High Schools of Allentown, Pennsylvania.* Doctoral Dissertation, Pennsylvania State University, 1962. Also in *Dissertation Abstracts* 23:3742.
Eighty students (two groups) were compared in each of four junior high schools; forty taught by the team plan, and forty by the departmentalized plan. Better academic work in language arts, mathematics, science and social studies found in both high and low ability students taught by the team approach.

Taylor, D. N. *A Study of Opinions of Educators Concerning Proposals to Reorganize Secondary Schools to Accommodate Large- and Small-Group Instruction, Independent Study, and Team Teaching.* Doctoral Dissertation, Columbia University, 1962. Also in *Dissertation Abstracts* 23:4270.
Studied reactions to proposals of Trump Plan. Compared expected and actual results.

Thompson, S. D. *An Analysis of Achievement Outcomes: Team Teaching and Traditional Classes.* Doctoral Dissertation, Stanford University, 1963. Also in *Dissertation Abstracts* 24:3240.
Studied 209 high school seniors. Found achievement outcomes significantly favor traditionally-taught group over team teaching group when examined immediately after a unit, and favor team classes twenty days thereafter.

Thomson, Scott D. "Can Team Teaching Aid Learning?" *Journal of Secondary Education* 36:423–429, November 1961. Also in *Dissertation Abstracts* 24:3240.

Discusses four additional elements usually used with team teaching: varied class size, modified period length, teacher aides, and technological devices. Gives analysis of research, factors of learning aided by team teaching, and endorses team teaching.

Trump, J. Lloyd. "Places to Learn." *Audiovisual Instruction* 7:516–517, October 1962. Also see *Phi Delta Kappan* 47:37–39, September 1965; *Bulletin of NASSP* 46:299–304, January 1962; 47:11–20, May 1963; and *Education* 85:327–332, February 1965.

Points out provisions must be made for small group, large group, and independent study in an adequate school. Shows their relationship to curricula, methods of teaching, instructional material, etc.

Selected Bibliography

Homogeneous vs. Heterogeneous Grouping

GENERAL REFERENCES

Balcom, Lois. "San Angelo Builds Three Rails for the Three R's." *Reporter* 19:28–31, October 30, 1958.
Report of ability grouping in San Angelo, Texas, for grades 1–12.

Bettelheim, Bruno. "Grouping the Gifted: Opinions Differ." *NEA Journal* 54:8–11, March 1965.
Gives pros and cons on ability grouping.

Borg, Walter R. *Ability Grouping in the Public Schools.* Madison, Wisconsin: Dunbar Educational Research Services, 1966.
Analyzes differences in the effect of ability grouping upon elementary, junior high, and senior high students. Surveys the literature and also reports results of his own study which compared achievement, study habits, peer status, attitudes, personality, and self-concept of 4,000 pupils in ability and in random grouped classes over a four-year period.

Carpenter, Finley. "Can the Argument About Pupil Grouping Be Resolved?" *School of Education Bulletin* (University of Michigan), 30:106–109, April 1959.
Examines assumptions underlying homogeneous and heterogeneous grouping. States conditions make each position plausible.

Eash, Maurice J. "Grouping: What Have We Learned?" *Educational Leadership* 18:429–434, April 1961.
Claims ability grouping is undemocratic and damaging to the self-concept.

Ekstrom, Ruth B. *Experimental Studies of Homogeneous Grouping: A Review of the Literature.* Princeton: Educational Testing Service, 1959. pp. 1–26.
Found thirteen studies favored homogeneous grouping, fifteen reported no advantage, and five reported no results.

Essex, Martin. "How Good Is Ability Grouping?" *PTA Magazine* 54:14–16, 35, September 1959.
Points out the need for better tools for identifying pupils' abilities.

Lawson, D. E. "An Analysis of Historic and Philosophic Considerations for Homogeneous Grouping." *Educational Administration and Supervision* 43:257–270, May 1957.
Says homogeneous grouping in one subject may extend the heterogeneity in another.

Luchins, Abraham S. and Edith. "Children's Attitudes Toward Homogeneous Grouping." *Journal of Genetic Psychology* 72:3–9, March 1948.
Concludes homogeneous grouping develops a caste system with negative effects on values and social and emotional health.

MacLean, Malcolm S. "Should the Gifted Be Segregated?" *Educational Leadership* 13:214–220, January 1956. Also in *Education Digest* 21:5–7, April 1956.

Advocates homogeneous grouping on the basis of ability. Says it does not violate democratic principles because today's society needs varied leadership skills.

Miller, W. S. and Otto, Henry J. "Analysis of Experimental Studies in Homogeneous Grouping." *Journal of Educational Research* 21:95–102, February 1930.
Says there is no clear-cut evidence that homogeneous grouping is either advantageous or disadvantageous. A comprehensive table summarizes important homogeneous studies up to 1930.

National Education Association. *Project on Instruction: Schools for the Sixties.* New York: McGraw-Hill Book Co., 1963. pp. 88–92, 96, 132.
Says efforts to set up groups in terms of ability and/or achievement do little to reduce the over-all range of pupil variability with which teachers must deal. Recommends, however, sometimes using selective grouping and regrouping by achievement, particularly at the secondary school level.

Passow, A. Harry. "The Maze of the Research on Ability Grouping." *The Educational Forum* 26:281–88, March 1962.
Cites research on ability grouping. Summarizes reasons the studies reported make it difficult to generalize. Gives need for further evidence.

Stonecipher, B. L. "Grouping in the Classroom." *Education* 83:77–79, October 1962.
Cites characteristics and merits of different types of homogeneous grouping such as ability, chronological age, interests, social age, and handicaps.

Torrey, Robert D. "Citizenship Education for the 'Gifted Adolescent.'" *Progressive Education* 33:78–84, May 1956.
Opposes grouping gifted students homogeneously on the basis of IQ. Says it tends to be drawn along social class lines. Believes tests have a middle- and upper-class bias.

ELEMENTARY SCHOOL

Austin, Mary and Morrison, Coleman. *The First R: Report on Reading in Elementary Schools.* New York: Macmillan Co., 1963. pp. 75–80.
Points out homogeneous grouping often gives a teccher the false impression she has thirty readers with identical abilities and leads to ignoring individual differences. When grouping is heterogeneous, the conditions are similar. Recommends flexible small grouping. Favors the ungraded approach, at least in reading, with children free to progress according to their achievement.

Balow, Irving H. "Does Homogeneous Grouping Give Homogeneous Groups?" *Elementary School Journal* 63:28–32, October 1962.
Says procedures more sophisticated than achievement tests will have to be used to form a truly homogeneous group.

Barbe, Walter B. and Waterhouse, Tina S. "An Experimental Program in Reading." *Elementary English* 33:102–104, February 1956. Also see articles by Barbe in *Education* 82:465–467, April 1962; and 85:137, November 1964.
Tried to determine if students in grades 4–6 could be better provided for in homogeneous reading groups. Reports a great deal of progress can be

made when students are grouped according to their reading level. No control group used for comparison.

Barthelmess, Harriet and Boyer, P. A. "An Evaluation of Ability Grouping." *Journal of Educational Research* 26:284–294, December 1932.

Describes Philadelphia experiment in ability grouping in grades 4–5. Heterogeneously grouped classes used as control. Results of achievement test given one school year later showed statistically significant achievement in arithmetic, in technical English skills, and in reading skills for the homogeneously grouped classes. Improvement was found in each of the groups (high, low, and medium).

Bremer, Neville. "First Grade Achievement Under Different Plans of Grouping." *Elementary English* 35:324–326, May 1958.

Compared reading achievement of low-, average-, and high-readiness students in grade one in the regular classroom with similar homogeneously grouped students in Amarillo, Texas. Found factors in addition to method of grouping accounted for reading achievement differences. Scores for high-readiness children in heterogeneous class were higher than scores of comparable students in homogeneous classes.

Brite, L. R. *Effect of Ability Grouping on Personality Variables of Slow-Learning Fifth Grade Pupils.* Doctoral Dissertation, Utah State University, 1963. Also in *Dissertation Abstracts* 24:4080.

Projective tests were used to determine effects of grouping slow learners together as compared to random grouping. No significant differences were found in aggression, inferiority feelings, or depression in samples of the same sex from the two groups but there were significant differences in performances on an achievement battery between boys and girls.

Cluff, James. *The Effect of Experimentation and Class Reorganization on the Scholastic Achievement of Selected Gifted Sixth Grade Pupils in Wichita, Kansas.* Doctoral Dissertation, University of Arkansas, 1964. Also in *Dissertation Abstracts* 25:1676.

Found academic achievement of 6th grade gifted pupils was not significantly affected by ability grouping after a two-year period. Participants felt, however, there was increased motivation, better social adjustment, and better work and study habits.

Cushenbery, D. C. *The Intergrade Plan of Grouping for Reading Instruction as Used in the Public Schools of Joplin, Missouri.* Doctoral Dissertation, University of Missouri, 1964. Also in *Dissertation Abstracts* 25:1780.

Found the use of the Joplin (departmental) Plan in grades 4–6 resulted in reading achievement above the national grade norms and in excess of mental-age grade expectancy. Principals, teachers, and parents widely accepted the plan.

Other readings favoring and opposing use of the Joplin Plan in reading found in *Elementary School Journal* 55:99–103, October 1954; 64:280–286, February 1964; 64:387–392, April 1964; and in 65:38–43, October 1964; in *Journal of Educational Psychology* 51:69–73, April 1960; in *Journal of Educational Research* 55:567–572, August 1962; and 56:317–321, February 1963; in *Journal of Experimental Education* 31:273–278, March 1963; in *Saturday Evening Post*, October 1957; and condensed in *Reader's Digest* 122:41–44, January 1958.

Degrow, G. S. *A Study of the Effects of the Use of Vertical Reading Ability Groupings for Reading Classes as Comparison with Heterogeneous Groupings in Grades Four, Five, and Six in the Port Huron Area Public Schools of Michigan over a Three-Year Period.* Doctoral Dissertation, University of Michigan, 1963. Also in *Dissertation Abstracts* 24:3166.
Found vertical ability grouping in reading in grades 4-6 did not contribute to reading achievement gains in Port Huron area schools. Found parents, teachers, and principals favored the plan.

Deitrich, F. R. "Comparison of Sociometric Patterns of Sixth-Grade Pupils in Two School Systems: Ability Grouping Compared with Heterogeneous Grouping." *Journal of Educational Research* 57:507–513, July 1964.
Attempted to determine effects of ability grouping on school adjustment of sixth-grade pupils. Concluded ability grouping (either homogeneous or heterogeneous) neither added nor detracted.

Dewar, John A. *An Experiment in Intra-Class Grouping for Arithmetic Instruction in the Sixth Grade.* Doctoral Dissertation, University of Kansas, 1961. Also in *Dissertation Abstracts* 22:2247. Also see *Elementary School Journal* 63:266–269, February 1963.
Eight 6th grade classes were selected in Johnson County, Kansas to determine effectiveness of ability grouping for arithmetic. Teachers' thought ability grouping with differentiated material was valuable. Majority of the students liked it.

Echternacht, C. and Gordon V. "Breaking the Lock Step in Arithmetic." *Arithmetic Teacher* 9:86–89, February 1962. Other readings favoring and opposing the Joplin Plan in arithmetic found in *Arithmetic Teacher* 10:12–17, January 1963.
Describes changing arithmetic instruction from a self-contained to a Joplin Plan achievement arrangement in grades 4–6 at Park School, San Mateo, California.

Ernatt, R. *A Survey of Pupils Attitudes Toward Inter-Grade Ability Grouping for Reading Instruction.* Doctoral Dissertation, Wayne State University, 1963. Also in *Dissertation Abstracts* 25:2651.
Concluded sufficient statistically significant negative reaction was recorded to warrant serious consideration concerning the advisability of instituting or continuing an intergrade ability grouping plan for reading instruction.

Franseth, Jane. "Does Grouping Make a Difference in Pupil Learning? Research Offers Leads." *Toward Effective Grouping.* Washington: ACEI, 1962. pp. 25–36. Condensed in *Education Digest* 28:15–18, January 1963.
Gives assumptions of ability grouping and cites research evidence that challenges them.

Goldberg, Miriam, *et al. The Effects of Ability Grouping.* New York, N.Y.: Teachers College Press, 1966.
Assessed the effects of ability grouping on the academic and personal-social learning of elementary school students. Findings raise some serious questions about the adequacy of the one-teacher classroom, especially for the able pupils. Found ability grouping is inherently neither good nor bad. Its value or harm depends upon the way it is used. It may be used effectively when it grows out of the needs of the curriculum and when it is varied and flexible. Study found no support for contention

that ability grouping causes negative effects on self-concept, aspirations, interests, attitudes toward school, and other nonintellectual factors.

Goldworth, Mary. "Effects of an Elementary School Fast-Learner Program on Children's Social Relationships." *Exceptional Children* 26:59–63, October 1959.

Found ability grouping of gifted in grades 4–6 did not have an effect on friendship patterns and group cohesion.

Groff, Patrick. "Comparisons on Individualized (IR) and Ability Grouping (AG) Approaches as to Reading Achievement." *Elementary English* 40:258–64, March 1963.

Annotation of thirty-nine studies and reports of comparisons of individualized reading programs with ability programs.

Holmes, Darrell, and Harvey, Lois. "An Evaluation of Two Methods of Grouping." *Educational Research Bulletin* 35:212–222, 1956.

Analyzed two methods of grouping for arithmetic and concluded that the method of grouping was not crucial. Found the results were not related to grouping procedures.

Hull, J. H. "Is Ability Grouping Taking Schools in the Wrong Direction?" *Nation's Schools* 73:71, 129, April 1964.

Favors ability grouping. Says those who attack it do not understand the need for refining the graded system. Opposite view by Rodney Tillman in same issue.

Jacobi, F. H. "Changing Pupils in a Changing School." *Educational Leadership* 17:283–287, February 1960.

Staff of desegregated school developed a plan called "overlapping ability grouping" to help with wide range of ability. Evidence revealed students achieved.

Johnson, L. G. *A Description of Organization, Methods of Instruction, Achievement, and Attitudes Toward Reading in Selected Elementary Schools.* Doctoral Dissertation, University of Oregon, 1964. Also in *Dissertation Abstracts* 25:6433.

Report of a study of reading instruction in four Eugene, Oregon schools with: (1) an individualized reading plan; (2) heterogeneous grouping with basal reader; (3) homogeneous grouping with basal reader in a self-contained room; and (4) homogeneous grouping with basal reader in a Joplin Plan. Concluded reading programs were similar in all four schools regardless of organization. There were no significant differences in attitude toward reading.

Karnes, Merle, *et al.* "Efficacy of Two Organizational Plans for Underachieving Intellectually Gifted Children." *Exceptional Child* 29:438–446, May 1963.

Assessed the efficacy of placing underachieving gifted students from grades 2–5 in homogeneous classes with gifted students who were achieving at a level commensurate with their abilities as compared with placing them in heterogeneous classes with a wide range of intellectual ability. Found homogeneous grouping had merit because it appeared to foster increased achievement, improved perceptions of parent-child relationships, and improved creativity.

Kincaid, Donald and Epley, Thelma. "Cluster Grouping." *Education* 81:136–139, November 1960.

Describes an ability grouping practice in Los Angeles City Elementary Schools. By definition in Los Angeles a cluster group is a small group of 2–10 pupils. Clustering a group of gifted pupils in a classroom with pupils from average to superior ability has been found beneficial.

Koontz, William F. "A Study of Achievement as a Function of Homogeneous Grouping." *Journal of Experimental Education* 30:249–253, December 1961.
Compared achievement of 4th grade pupils in homogeneous and heterogeneous classes. Found no difference in achievement. Concluded many variables that need to be controlled evaded control in the study. Recommended further investigation.

Kyte, George C. "Maintaining Ability Grouping in Spelling." *Phi Delta Kappan* 30:301–306, 1949.
Study in grades 3–6 demonstrated the need for regrouping. Observed the tendency of homogeneous groups to become heterogeneous. No control group or statistical measures were used.

Manolakes, George. "Oral Language and Learning." *Instructor* 74:9, 16, November 1964.
Recommends reassessing some instructional practices such as readiness programs, grouping, and the teacher's role to find ways to encourage oral language development. Questions isolation of less proficient children into homogeneous groups.

McCracken, R. A. "Using Reading As a Basis for Grouping." *Education* 84:357–359, February 1964.
Describes results of an investigation with 971 students in grades 2–6 to determine whether informal reading inventories could be used advantageously as a basis of grouping students for reading instruction. Found the inventory successful in determining instructional levels.

McCall, William A. "A Comparison of the Educational Progress of Bright Pupils in Accelerated and in Regular Classes." *Twenty-Seventh Yearbook of the National Society for the Study of Education, Part II,* 1928.
Sixty-seven pairs of students, matched for MA and CA, were compared for achievement in reading, spelling, and mathematics over a two-year period. The pupils ranged over grades 3 to 7. Those grouped homogeneously gained about 7 months in the two-year period over the mixed-class students. Concludes one can be 62 per cent certain that growth in these abilities is more favorable in segregated classes.

Morgenstern, A. *A Comparison of the Effects of Heterogeneous and Homogeneous (Ability) Grouping on the Academic Achievement and Personal-Social Adjustment of Selected Sixth-Grade Children.* Doctoral Dissertation, New York University, 1963. Also in *Dissertation Abstracts* 24:1054.
Found significant differences in favor of homogeneous grouping in specific subject areas such as language and word meaning.

Parker, J. Cecil, and Russel, David H. "Ways of Providing for Individual Differences." *Educational Leadership* 11:168–74, December 1953.
Recommends ways of meeting needs within an elementary heterogeneously grouped class such as sub-grouping, use of a variety and a range of instructional materials, use of a variety and range of methods and experiences, and flexibility in assignments, responsibilities, and activities.

Pinney, G. C. "Grouping by Arithmetic Ability: An Experiment in Teaching Arithmetic." *Arithmetic Teacher* 8:120–123, March 1961.
Study of sixth-grade achievement grouping. Control group not used. Concludes program is a success.

Provus, Malcolm M. "Ability Grouping in Arithmetic." *Elementary School Journal* 60:391–398, April 1960.
Report of study designed to study the effect of ability grouping in grades 4–6. Results favorable to plan.

Raymond, Margaret. *An Investigation of Homogeneous Grouping for Reading Versus Grouping Within the Classroom.* Master's Thesis, San Diego State College, 1956.
Study compares achievement of fourth graders grouped homogeneously by ability with that of those grouped within the classroom. Found no significant difference. Concluded, however, brighter children achieve better under homogeneous grouping.

Robinson, Glen. "Principals' Opinions About School Organization." *National Elementary Principal* 41:39–42, November 1961.
1961 NEA survey of 721 elementary school principals reveals they favor a school with 400–500 pupils, in grades K–6 with self-contained classes of 20–25 pupils. Principals were equally divided on ability grouping.

Rothrock, D. G. "Heterogeneous, Homogeneous or Individualized Approach to Reading?" *Elementary English* 38:233–235, April 1961.
Writer compares the effectiveness of three approaches of organizing a reading class at McPherson, Kansas. Concludes that great improvement in reading achievement can result under each of the three methods from good teaching with appropriate materials and stimulation.

Shane, Harold G. "Grouping in the Elementary School." *Phi Delta Kappan* 41:313–318, April 1960.
Identifies thirty-two different grouping plans.

"Some Tentative Conclusions About Grouping." *Education Briefs* 40:1–5, 28–29, May 1964. Also in *Education Digest* 30:47–49, November 1, 1964.
Lists conclusions generalized from research on grouping and concludes that factors other than grouping procedures must be responsible for the differences in progress of children grouped heterogeneously or homogeneously according to ability.

Torrance, E. Paul. "Peer Pressures in Homogeneous and Heterogeneous Groups." *Rewarding Creative Behavior.* Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1965. pp. 187–220, 260. Also see *Elementary School Journal* 62:139–147, December 1961.
Reports study with 4–6th grade students in Minneapolis. Students were grouped homogeneously and heterogeneously. Data revealed greater disruptive social stress in heterogeneous classes than in homogeneous classes when they were thus divided for creative activities. Researcher says these results should not be interpreted to mean teachers should always form homogeneous groups for creative tasks. There are times when it is advantageous to increase social stress. Says the decision concerning grouping must be influenced by the type of development which is of concern.

JUNIOR AND SENIOR HIGH SCHOOL

Abrahamson, David. "The Effectiveness of Grouping for Students of High Ability." *Education Research Bulletin* 38:169–182, October 14, 1959.

Findings of study indicate no superiority of preparation for college can be claimed for either the special high school or the honor-class programs as contrasted with the comprehensive high school which grouped students heterogeneously. Found achievement in college depended upon general ability rather than the high school from which they came.

Adams, Philip C., Jr. "Ability Grouping in Junior High School." *Journal of Health, Physical Education, Recreation* 35:83, May 1964.

Describes ability grouping in physical education in a junior high school in Montgomery County, Maryland. Recommends it and says the school plans to continue it.

Balow, Irving H. "Effects of Homogeneous Grouping in Seventh Grade Arithmetic." *Arithmetic Teacher* 11:186–191, March 1964.

On the basis of a study in southern California author concluded sectioning on the basis of arithmetic tests given at the end of sixth grade and teacher judgment does not result in homogeneous sections. Study suggested teachers were teaching to the least capable in each section.

Barton, D. P. *An Evaluation of Ability Grouping in Ninth Grade English.* Doctoral Dissertation, Brigham Young University, 1964. Also in *Dissertation Abstracts* 25:1731.

Found random grouping as effective as ability grouping for ninth-grade English students when effectiveness is measured by English achievement, marks, number of underachievers, and lessening of pressures to cheat. Teachers believe, however, that they do a more effective job of teaching when range of ability is reduced.

Baumgartner, R. A. "A Differentiated Curriculum for Homogeneous Groups." *Emerging Practices in Mathematics Education.* Twenty-Second Yearbook. Washington, D.C.: National Council of Teachers of Mathematics, a department of the NEA, 1954. Chapter 2.

Advocates a two-track program for 9th and 10th grade mathematics with course objectives outlined for all four high school years.

Bicak, L. J. "Achievement in Eighth Grade Science by Heterogeneous and Homogeneous Classes." *Science Education* 48:13–22, February 1964. Also see *Science Teacher* 31:50, October 1964.

Gives the design and statistical analysis of data of a homogeneous and heterogeneous grouped eighth grade.

Billett, R. O. "A Controlled Experiment to Determine the Advantages of Homogeneous Grouping." *Educational Research Bulletin* 7:133–140, May 2, 1928.

Advocates ability grouping after a three-year study with experimental and control groups in ninth-grade English.

Brown, B. Frank. "An Answer to Dropouts: The Nongraded High School." *The Atlantic* 214:36–89, November 1964. See further references in Chapter 4 bibliography.

Describes the nongraded Melbourne High School. Provision is made for bright, average, and slow students.

Cawelti, Gordon. *The Status of Administrative and Instructional Provisions in Ability Grouped Classes of Mathematics and English in Selected Midwestern High Schools.* Doctoral Dissertation, State University of Iowa, 1962. Also in *Dissertation Abstracts* 23:2749. Also see *Bulletin of NASSP* 47:34–39, March 1963; and *Education Digest* 29:23–25, September 1963.
Describes administrative and instructional procedures followed in providing ability grouping in 9th and 10th grade English and mathematics classes.

Clark, Gwyn R. and Noall, Matthew F. "Better Staff Utilization in Hurricane High School Through Language Arts Reorganization." *Bulletin of NASSP* 45:223–227, January 1961.
Homogeneously grouped nongraded English classes resulted in gradual student improvement. Teachers rotated among various sections and taught as a team.

Clark, Leonard. "Ability Grouping—A Third Look." *Bulletin of NASSP* 47:69–71, December 1963.
Reminds the reader that ability grouping and curriculum tracks are not the only devices for providing for individual differences. Recommends grouping within the secondary school class, differentiated assignments, individualized instruction, flexible promotion system, nongraded school, etc.

Conant, James B. *The American High School Today.* New York: McGraw-Hill, 1959. pp. 49, 55, 57.
Recommends achievement grouping in required subjects with special programs for slow readers, for academically talented, and for highly gifted pupils.

Cromble, Mona G. "Dr. Conant Looks at Grades 7, 8, 9." *California Journal of Secondary Education* 35:452–459, November, 1960.
Says Dr. Conant recommends grade 8 be fully departmentalized with ability grouping on the basis of achievement in each subject.

Drews, Elizabeth. *The Effectiveness of Homogeneous and Heterogeneous Ability Grouping in Ninth Grade English Classes with Slow, Average, and Superior Students.* U.S. Dept. of Health, Education, and Welfare, Office of Education, Co-operative Research Grant, Project No. 608. Washington, D.C.: Superintendent of Documents, Government Printing Office, 1959.
Reports students and teachers prefer homogeneous grouping. Found low-ability pupils participated more actively in classroom activities and reported more interest in school and more confidence in their own ability.

Fick, W. W. *The Effectiveness of Ability Grouping in Seventh Grade Core Classes.* Doctoral Dissertation, University of Kansas, 1962. Also in *Dissertation Abstracts* 23:2753.
Found ability grouping did not produce significant changes in pupils' attitudes toward themselves.

Glancy, Philip B. "Brookside Junior High, Sarasota, Florida, Strives for Quality Education." *Bulletin of NASSP* 46:157–160, January 1962.
Describes large-group instruction and team teaching. Grouping was on basis of similar abilities in most instances.

Hansen, Carl F. "Ability Grouping in the High Schools." *Atlantic* 206:123–127, November 1960.
Recommends four-track ability grouped high school system.

Hay, Morris E. "Effective Learning Through Grouping in Junior High School." *California Journal of Secondary Education* 32:11–13, January 1957.
Discovered homogeneous ability grouping revealed few significant differences between groups but wide differences within each.

Hood, C. E. "Do We Expect Too Much from Ability Grouping?" *Clearing House* 38:467–470, April 1964.
Describes Custer Plan used effectively in Miles City, Montana. Gives pros and cons.

Howell, W. J. "Grouping of Talented Students Leads to Better Achievement in the Secondary School." *Bulletin of NASSP* 46:67–73, March 1962.
Reports a study of grouping talented students in Penfield, New York, lends support to ability grouping.

Humphrey, J. W. "Dexter Plan for Ability Grouping." *Clearing House* 35:423–426, March 1961.
Explains 7th and 8th grade achievement grouping in arithmetic and English. Despite some disadvantages, plan found to be workable and desirable.

Kolson, Clifford J. "A Workable Approach to Grouping." *Clearing House* 36:539–544, May 1962.
Discusses pros and cons of homogeneous and heterogeneous grouping. Recommends the use of the quadrant of expectancy as a tool for determining grouping. Says effective grouping involves: narrow range, nonstigmatized students, recognition of different rates of learning, ease of administration, and no extra financial commitment.

Kvaraceus, William C. "The Behavioral Deviates in the Culture of the Secondary School." *Frontiers of Secondary Education.* Proceedings and Conferences on Secondary Education. Syracuse: Syracuse University Press, 1958. pp. 18–27.
Points out age-grade grouping: (1) implies to teachers and pupils an equality and homogeneity that does not exist and leads to undifferentiated instruction through use of the single text and identical assignment; (2) reinforces the already overly strong youth culture. Recommends broader grouping by overlapping age membership in some classes and ability achievement grouping in others.

Lauchner, A. H. and Horner, H. F. "What Are Current Trends In Grouping Students for Effective Instruction?" *Bulletin of NASSP* 43:6–7, April 1959.
Advocates junior high ability grouping.

Lovell, J. T. "Bay High School Experiment." *Educational Leadership* 17:383, March 1960.
Homogeneous experimental group made greater gains in 10th grade English than heterogeneous control group. Same thing did not occur in algebra and history.

Manchester, Clyde R., and Silberberg, Norman. "Staff Attitudes Toward a Special School Program for the Talented." *Bulletin of the NASSP* 47:58–68, March 1963.
Staff reports ability grouping in mathematics and science in St. Paul, Minnesota public secondary schools had a positive effect on morale of teachers and a negative effect on counselors. Staff felt plan should be continued and recommended it be extended into other subject areas.

Martin, W. B. *Effects of Ability Grouping on Junior High Achievement.* Doctoral Dissertation, George Peabody College for Teachers, Nashville, Tennessee, 1958. Also in *Dissertation Abstracts* 19:2810.
Found little evidence ability group benefited any of the segregated groups.

McCown, George W. *A Critical Evaluation of the Four Track Curriculum Program of the District of Columbia Senior High School with Recommendations for Improvements.* Doctoral Dissertation, University of Maryland, 1960. Also in *Dissertation Abstracts* 21:2558.
Evaluated achievement of honors track and basic track students with that of heterogeneously grouped students. Differences on all measures favored honors track students.

McDaniel, M. C., and Faunce, R. C. "Ability Grouping: An Issue at the Junior High School Level." *Teachers College Journal* 34:64–69, November 1962.
Points out pros and cons.

National Education Association, Project on Improving English Composition. *Improving English Composition.* (Edited by Charles Bish and Arno Jewett). Washington, D.C.: the Association, 1965.
Report on a five year project for improving English composition begun by NEA in 1962. Recommends, among other things, multi-track program for English students.

Otto, Henry J. "Grouping Pupils for Maximum Achievement." *School Review* 67:387–395, Winter 1959.
Discusses the basic educational issues and practical problems associated with grouping. Advises use of homogeneous grouping in the required content and skill subjects and heterogeneous grouping in all others beginning in the seventh grade.

Phillips, J. A. *Ability Grouping and Teacher Attitudes: An Exploratory Study of Junior High School Teachers and Their Commitment to Ability Grouping.* Doctoral Dissertation, Michigan State University, 1961. Also in *Dissertation Abstracts* 22:172.
In a study of 440 Maryland junior high teachers, researcher found most teachers preferred ability grouping. Found some inverse relationship between teacher's commitment to ability grouping and his ability to create good rapport with students.

Ramey, A. R. "New Look at Ability Grouping in the Junior High Schools." *California Journal of Secondary Education* 31:289–291, May 1956.
Study revealed teachers tend to teach to the average child in any group and to neglect individual differences. Ability grouping resulted in classes where achievement differed little.

"Sectioning in High School." *School and Society* 87:518, December 19, 1959.
A short report on Herbert J. Klausmeier's study in three Wisconsin high schools to determine how sectioning affected social relationships. Concluded sectioning required subjects did not adversely affect social relationships.

Torgelson, John W. *A Comparison of Homogeneous and Heterogeneous Grouping for Below-Average Junior High School Students.* Doctoral Dissertation, University of Minnesota, 1963. Also in *Dissertation Abstracts* 25:2300.
Concluded homogeneous grouping for below-average junior high students was not superior to heterogeneous grouping.

Turnbough, Roy C. "Curriculum Design—Strength and Weaknesses of the Track System." *Bulletin of NASSP* 45:72–74, April 1961.
Assistant Superintendent of J. Sterling Morton High School and Junior College, in Berwyn, Illinois, describes its ability grouping plan. Lists eight difficulties inherent in any grouping system.

Usilaner, Hiram. "The Four-Track System in Physical Education." *Bulletin of NASSP* 44:132–135, October 1960.
Recommends grouping pupils as homogeneously as possible according to their physical skills.

Vergason, G. A. "Critical Review of Grouping." *High School Journal* 48:427–433, April 1965.
Presents findings of studies. Shows results conflict. Calls for adequate research.

Wilcox, John. *A Search for the Multiple Effects of Grouping Upon the Growth and Behavior of Junior High School Pupils.* Doctoral Dissertation, Cornell University, 1963. Also in *Dissertation Abstracts* 24:205.
Tested four hypotheses and found: a more positive self-concept among pupils below IQ 90 as they were more homogeneously grouped; attitude toward school of pupils grouped homogeneously was more positive below IQ 104, and more negative above IQ 105; no significant relationship between homogeneity of grouping and achievement in critical thinking; and mean level of achievement improved as schools grouped more homogeneously. Recommends rigorous curriculum differentiation and establishment of group standards.